

Kenwood - Isles Area Association



Nani Jacobson  
SWLRT Project Office  
6465 Wayzata Blvd Suite 500

Re: SDEIS Response

**From:** [Susu](#)  
**To:** [swlrt](#)  
**Subject:** Comments on the Southwest LRT SDEIS  
**Date:** Tuesday, July 21, 2015 8:09:53 PM  
**Attachments:** [SWLRT Comments on the SDEIS 7-21-15.docx](#)

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# FRIENDS OF COLDWATER

1063 Antoinette Avenue Minneapolis MN 55405-2102 612-396-6966  
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July 21, 2015

Nani Jacobson, Assistant Director  
Environmental and Agreements  
Metro Transit—Southwest Light Rail Transit Project Office  
6465 Wayzata Boulevard, Suite 500  
St. Louis Park MN 55426  
[SWLRT@metrotransit.org](mailto:SWLRT@metrotransit.org)

Dear Ms. Jacobson,

Please see the attached Comments on the Southwest LRT SDEIS.

Friends of Coldwater is a Minnesota non-profit, non-governmental organization founded in 2001 to educate citizens to protect our water commons.

Sincerely,  
Susu Jeffrey

Attachment: Comments on the Southwest LRT SDEIS

# FRIENDS OF COLDWATER

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## **Comments on the Southwest Light Rail Transit Project SDEIS**

The Southwest Light Rail Transit (SWLRT) public process by Hennepin County Commission and Metropolitan Council has been an exercise in pretend democracy. From the beginning the LRT was presented by elected and appointed government officials as a fait accompli.

Although design plans have morphed since 2014 no new municipal consent procedure appears to be planned. With an estimated cost approaching \$2-billion, half the funds from federal sources, SWLRT is the most expensive tax-payer program ever imagined for Minnesota.

### **Co-Location**

The off and on again co-location of heavy and light rail traffic was a bait-&-switch tactic. To illustrate the intent to deceive the public about the safety of co-location no "blast zone" map of ethanol rail cars next to the SWLRT was produced for citizen inspection and comment.

From St. Louis Park to the baseball stadium, through the Chain of Lakes, the half mile wide residential and park land remains menaced. The manipulation of promises and threats reifies citizen mistrust of government powers.

### **The "Equity Train"**

The "equity" argument for the SWLRT was a brilliant public relations maneuver to silence guilt-prone white people. Equity is P.C. The pitch was that underserved black

Northsiders would get transportation to jobs in the southwest suburbs. Like the promise to move heavy freight with dangerous ethanol traffic out of the urban zone, the equity promise lapsed.

SWLRT was never planned to move the densely populated Minneapolis black Northside or white Uptown populations. In addition to being a construction jobs program the SWLRT was apparently designed as infrastructure for workers to get to suburban cubical factories.

### **Urban vs. Suburban**

The wealthy southwest suburbs pitted their financial clout against urban public parklands and people—and money won. Furthermore the outcome was assured ahead of time since the elected Hennepin County Commission and the appointed Metropolitan Council are dominated by white suburbanites. Apparently black economic lives do not matter here.

### **Reducing Cars and Auto Emissions**

The Draft EIS predicted no reduction in automobile greenhouse gas emissions with SWLRT until after 2050.

### **Water**

Destruction of parkland is the hallmark of recent transportation development in Minneapolis. Our famous parks, the only undeveloped urban land, are actually lakes, creeks and wetlands previously too wet for development

### **The Great Medicine Spring and Glenwood Spring**

The Interstate-394 corridor is dewatered daily at the rate of 2.5-million gallons. Plastic drain tile pipes with little holes where groundwater infiltrates funnel the water into a series of ponds from the Highway 394/100 intersection to Sweeney Lake and out Bassett Creek, under downtown Minneapolis, to the Mississippi. A sign at the mouth of Bassett Creek used to warn pregnant women and children under six not to eat fish caught there.

Two springs dried up with Highway 394 permanent dewatering: Glenwood Spring, formerly sold as commercial spring (now well) water and the Great Medicine Spring in Theodore Wirth Park. Indian people "came hundreds of miles to get the benefit of its medicinal qualities" Col. John H. Stevens, first white Minneapolis resident, said of the Great Medicine Spring in 1874.

The place is still there but no water runs. Treated city water is now piped into Wirth Park. The Minneapolis Park and Recreation Board waited 10-years for the spring to recharge. In 1999 a 150-foot well was drilled with negligible results.



## **Coldwater Springs**

The Hiawatha LRT project reduced the flow to Coldwater by more than 35-percent. Coldwater is the last natural spring in Hennepin County, is a federally recognized Dakota sacred site, it furnished water to Fort Snelling 1820-1920, and is considered the birthplace of Minnesota where the first Euro-American community developed to service the fort.

MnDOT offered to pump treated city water into the Coldwater reservoir before it was forced to redesign the Hwy 55/62 interchange. Nevertheless Hiawatha LRT and Highway 55 reroute construction resulted in the loss of 46,000 gal/day—from 130,000 down to 84,000. The Hwy 55/62 interchange pipes out 27,500 gal/day but a mysterious 18,500 gallons is simply gone.

“How could your professionals be so far off in their hydrology? What facts were not available to you,” Judge Franklin Knoll asked MnDOT attorneys in Hennepin County court 9/13/01. “MnDOT is one of the largest and most well-staffed departments in Minnesota. Your engineers, geologists and water specialists all signed off on this design,” Knoll said.

MnDOT attorney Lisa Crum said “MnDOT (design) standards were based on reasonable estimates.” Coldwater supporters were repeatedly told that the groundwater would “just flow around” sunken highways built into the water table. The inference was that the water would just flow around and return to its former paths. It did not.

Removing groundwater results in dirty water and dry land. The land dries out when groundwater is prohibited from running through nature's slower filtration system. The water gets dumped into the lakes, creeks and the Mississippi with contaminants adhering to dirt particles. Think of mercury poisoning from fish taken in our northern lakes far from the coal-fired power plants that vented into the air.

Dry soil does not easily absorb the increasingly heavy storms events experienced with climate change. Storm water runs off quickly with top soil, fertilizers, air and road impurities, and goose and duck poop.

## **Tunnel Through the Chain of Lakes**

A half-mile tunnel would be inserted (after tree removal) between Cedar, Lake of the Isles and Calhoun. Solid steel walls would be sunken 55-feet down for the length of the tunnel to anchor the 35-foot wide structure. Otherwise it would float up or down with fluctuating underground water levels.

According to the Burns and McDonnell Engineering Company water study for the Metropolitan Council as much as 24,000 gallons per day from inside and around the tunnel would be pumped out. Less groundwater flow into and out of the lakes would

allow more contaminants and particulate matter to fill in and remain in our public waters, our water commons.

Again citizens are being assured that the groundwater will "just flow around" a half mile long "shallow" tunnel—built into the already saturated land between the lakes. In fact the very same expert consultants in hydrology and geology are employing the very same language to assure Metropolitan Council appointees, Hennepin County Commissioners, Minnehaha Creek Watershed District staff and managers, and concerned citizens that groundwater will "just flow around" a huge underground tunnel in the land between the Minneapolis Chain of Lakes.

The idea that people can "manage" water is being sold like comfort food. Hydrologists, geologists, architects and engineers are hired to plan waterproof structures. Sure—in a virtual world. In our world infrastructure is I-35W falling into the Mississippi or a brain-eating amoeba in Lake Minnewaska.

The US business model did not evolve to plan sustainably. Public works programs are funded on a formula of minimum cost because cost is somehow limited to the cost of construction.

Although SWLRT is the most expensive public works program ever proposed in Minnesota wet soil conditions along the proposed route would multiply costs. "Reasonable estimates" versus digging down into a saturated landscape will become obvious if this project makes it through the legal hurdles set up to protect citizens from government-business collusion.

### **Conflict of Interest**

The last hurdle before golden shovels break the soil is normally a permit from the Minnehaha Creek Watershed District (MCWD). The district purchased 17-acres of land across the street from the proposed SWLRT station at Blake Road with a \$15-million tax payer bond.

Odds are the appointed MCWD Board of Managers would vote to permit SWLRT.

When developers take over a watershed the mandate to protect the water commons is compromised. So ownership of a \$15-million parcel of land at the proposed SWLRT Blake station appears to have influenced MCWD's favorable study of the proposed shallow tunnel plan.

Below are transcribed legal audio minutes of the May 8, 2014 regular meeting of the Minnehaha Creek Watershed District Board of Managers (appointed by the Hennepin and Carver County Board of Commissioners).

The discussion centers on the SWLRT and 17-acres at Blake Road and West Lake Street, south of Knollwood Mall, in Hopkins, across the street from the proposed Blake

SWLRT station. The station location is now part of a strip mall, just south of the railroad tracks and Pizza Luce at 210 North Blake Road.

The parcel includes a large cold food storage warehouse, and borders Minnehaha Creek and the Cedar Lake bike trail which is next to the RR tracks. The land was purchased about four years ago for \$15-million for redevelopment investment, for storm water ponds (water storage) and Minnehaha Creek restoration.

At a MCWD Board of Managers meeting the question of interest payments on the \$15-million bond was posed by SWLRT opponent Bob Carney. Managers skirted the question. Approximately \$100,000 per year in interest payments would be expected.

The players in this 2014 audio transcription include MCWD Board of Managers:

- Sherry Davis White, president, Orono, term expired 3/15 (wife of former Orono mayor, Jim White who organizes housing developments), reappointed until 3/18
- Brian Shekleton, vice president, St. Louis Park, term expires 3//16 (works for Hennepin County Commissioner Peter McLaughlin)
- Richard Miller, treasurer, Edina, 3/17 (former Wells Fargo employee who arranged bonding, government finance)
- Jeff Casale, secretary., Shorewood, 3/15 (realtor) Kurt Rogness of Minneapolis, architect, was appointed for a three-year term replacing Casale. Minor felony charges against Casale for using MCWD staff in his private real estate business were dropped because "the alleged embezzlement occurred outside the statute of limitations."

Three managers were absent:

- Jim Calkins, Minnetonka, 3/16 (PhD, professor Horticultural Science UMN)
- Pamela Blixt, Minneapolis, 3/17 (MA public administration, City of Minneapolis emergency services)
- Bill Olson, Victoria, 3/16 (engineer Rockwell International)

--Richard Miller "...the worst could be that LRT didn't get approved...we've got to do a quiet plan if LRT doesn't go through and it (the land) doesn't have its commercial value at its highest and best use as a train station site....We've got to build in our budget someplace (for) the losses we're going to absorb on disposing of that site, because we always know [sic] we've got more in it than we'll get from it but the benefits of the (Minnehaha) creek frontage, and the (storm water) storage capacity, etc. you know it had certain value to us and so that could cover the, but you know, if we do have a problem in 2 or 3 years or 4 years you know let's not have it in a situation where we're in a disaster with no plan. And I don't think it would take much of an effort to plan it out, you know, how we're going to pay for the costs.

[The bonding loan to be paid back with tax money comes due in 2017]

--James Wisker, MCWD staff Director of Planning, Projects & Land Conservation: "By the end of July we should have a lot more clarity...worst case scenario planning we should revisit like, July 24<sup>th</sup> by then all municipal consent should have occurred."

[In a 6/16/14 email Wisker wrote to the author: "Regarding (SWLRT) dewatering. I referenced that there would be no system in place to perpetually dewater following construction completion."

--Richard Miller: "We can't be naked when that \$15-million comes due (in) 2017....We're planning for the best but we're ready for the worst".

--unidentified male voice: "When we started on this...we had very strong interest in senior housing...there's no question it's going to be more valuable with light rail..."

--Brian Shekleton: "And I will offer that light rail will happen..."

--Jeff Casale: (interrupts) "That's going in the minutes I think."

-- (laugh)

--Brian Shekleton continues: "and by every indication I get that commitment from (Minneapolis) city council members."

Jeff Casale: If we're going to have this on the record...disaster is nothing like I would have considered it as. I think the property has been improved significantly from the work that we've done surrounding it...whether or not LRT goes in that property will have significant real estate value and I would not characterize it at all as disaster planning.

Richard Miller: "Well, you can call it what you want but it will be (a disaster) when the note comes due and we got a third of the value of the note."

The rhetorical questions are: who's watching out for the water and is this land purchase a conflict of interest for MCWD managers who would be voting to permit the SWLRT?

It appears that citizens, not officials or paid experts or politicians or white suburban developers, care about the sustainability of keeping Minneapolis waters clean enough for human recreation.

Clearly the voting managers of a permitting agency should be leery of the appearance of a conflict of interest regarding public money and political power. It certainly appears to be conflict of interest, legally actionable or not.

The Minnehaha Creek Watershed District deciders have violated public trust with their ambitious financial scheme that supersedes the preservation and protection of the water commons.

## **Water Standards Enforcement**

Neither the MCWD nor the state Department of Natural Resources (DNR) has enforcement powers. The state legislature did not grant permitting agencies police powers.

It took the DNR three years to win a court order to stop illegal pumping of groundwater from 1800 West Lake Street into the lagoon. Some 240,000 gallons per day of water from a sub-sub basement parking garage was piped into a city sewer emptying into the lagoon between Lake of the Isles and Calhoun.

Two kinds of pollution flowed into the lagoon and Calhoun and down the chain: a temperature differential and garage drippings including grains of heavy metals from cars mixed with oil products. The temperature change was noticed by Loppett organizers when parts of the lagoon failed to freeze which could have allowed skiers to fall through rotten ice.

The problem was "solved" by moving the discharge pipe. Before the 1800 West Lake Street upscale apartment construction the Minneapolis Park Board spent a quarter million dollars on Lake Calhoun clean up.

Calhoun and Cedar lakes have six of the city's dozen swimming beaches. Lake Hiawatha at the butt end of Minnehaha Creek accumulates all the flowing pollutants from much of Hennepin County and most of Minneapolis since water obeys gravity.

The Park Board plans to close the beach at Hiawatha, remove the sand and build an "open pavilion." While the beach is a neighborhood treasure the shallow lake is a pollution catch basin. A new \$7-million natural filtration public swimming pool at Webber Park in north Minneapolis seems to be the future of safe swimming.

### **Small Scale Flexibility**

Nobody is disputing the need for transportation.

LRT is 20th century technology—big, clunky, really pricey and fixed. We need to have smaller, more numerous and flexible transport choices. The greater Twin Cities are growing in an expanding circumference with multiple "centers." People commute from a 27-county radius.

The push to build big rather than to decentralize is less efficient in both time and money, does not provide jobs and sabotages our water. The current SWLRT proposal is a dinosaur.

Sincerely,  
Susu Jeffrey  
for Friends of Coldwater  
[susujeffrey@msn.com](mailto:susujeffrey@msn.com)

**From:** [BLUMENTHALAL@aol.com](mailto:BLUMENTHALAL@aol.com)  
**To:** [swlrt](#)  
**Subject:** comments  
**Date:** Tuesday, July 21, 2015 3:47:42 PM

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We were born and raised in Minneapolis over 70 years ago. We now reside in Florida and spend summer months on vacation in Golden Valley. We are appalled at what we understand is the planned SWLRT routing.

It seems to us that THE MOST IMPORTANT element of any transit system is to first provide reasonably priced public transportation to THOSE WHO NEED IT THE MOST. Things have not changed that much since we left the northside of Minneapolis. We do not see any public transportation benefit from the current SWLRT routing to those living anywhere north or northwest of Minneapolis. We do see an incredible amount of disruption planned for areas adjacent to our chain of lakes and the recreational areas around them. We believe the route serves middle and upper-middle income individuals/families.

The outcome will not affect our lives personally. But we are very concerned that the greatest living city in America will be transformed into another city that pours its money into a failed transit system that will not benefit the people who need it the most - thus taking money from a park and recreation system that is second to none.

Allen & Shirley Blumenthal  
 250 Turners Crossroad So.  
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 Golden Valley, Mn 55416  
 and  
 897 Collier Court  
 Apt. 302  
 Marco Island, Fl 34145

**From:** [Haworth, Brooke \(DNR\)](#)  
**To:** [swlrt](#)  
**Subject:** DNR comments-Supplemental DEIS- SW Light Rail Transit  
**Date:** Tuesday, July 21, 2015 5:30:58 PM

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Dear Ms. Jacobson,

The Minnesota Department of Natural Resources (DNR) has reviewed the Supplemental Draft EIS for the Southwest Light Rail Transit. We offer the following brief comments.

For the most part we agree with document statements regarding Environmental Effects (the “no effect” determination in the DEIS) for Biota and Habitat, including Threatened and Endangered Species.

- As project designs move forward, we request that consideration be given to identification of high profile areas for wildlife crossings (wetlands, public waters, open park spaces), and that wildlife fencing and turn-back structures be incorporated to minimize wildlife mortality.
- We request that wildlife friendly erosion materials (natural materials, no welded webbing) be used throughout the project, especially around wetland and open water areas, to minimize mortality to small mammals and herpetofauna.
- Before construction begins, we request that an updated DNR Natural Heritage Inventory (NHIS) data review be requested to determine if any new records of rare species have been identified within the project footprint. An NHIS review is considered valid if performed within one year.

Design of public water crossings identified in the document should avoid impacts below the ordinary high water level; if this is not possible, steps to minimize impacts will be required during consideration of DNR public water permits. Unavoidable impacts may be waived to WCA at the DNR’s discretion if deemed appropriate. DNR will continue to follow the progress of the project and provide guidance as needed.

We appreciate the attention given to control of potential groundwater contamination in the document, as well as consideration of groundwater flow and withdrawal. A DNR dewatering permit is required for withdrawals in excess of 10,000 gallons/day. Groundwater models and management plans will be reviewed by DNR staff during the application process.

Thank you for the opportunity to review this document. Please feel free to contact me with any questions.

Sincerely,

*Brooke Haworth*

Environmental Assessment Ecologist, Central Region  
MnDNR Division of Ecological and Water Resources  
1200 Warner Road, St. Paul, MN 55106  
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**From:** [squinlivan@comcast.net](mailto:squinlivan@comcast.net)  
**To:** [swlrt](#)  
**Cc:** [Lori Home Lewis](#)  
**Subject:** Endorsement of Light Rail Transit Done Right Comments on SDEIS  
**Date:** Tuesday, July 21, 2015 2:53:23 PM

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I endorse and support the comments submitted by Light Rail Transit Done Right (LRTDR). Please add this letter to the record of comments on the Southwest Light Rail Supplemental DEIS.

Steve Quinlivan  
3141 Dean Court #704  
Minneapolis, MN 55416



**From:** [Jennifer Labovitz](#)  
**To:** [swlrt](#)  
**Subject:** Endorsement of LRT Done Right's comments to the SDEIS  
**Date:** Tuesday, July 21, 2015 11:32:41 PM

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Dear Met Council,

I fully endorse the response submitted by LRT Done Right. I hope critical assessment of what's been done so far and the potential cost of fulfilling the current proposal will yield cool heads and more rational decision making.

Best,

Jennifer

Jennifer Labovitz  
[jennifer.labovitz@comcast.net](mailto:jennifer.labovitz@comcast.net)

**From:** [Asad Aliweyd](#)  
**To:** [swlrt](#)  
**Subject:** Environmental Comment from New American Academy  
**Date:** Tuesday, July 21, 2015 10:34:30 PM  
**Attachments:** [EP\\_DevGuide102913-2-3-3.pdf](#)

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**New American Academy (<http://www.newamericanacademy.org/>) is a community organization that serves the primarily Somali immigrant community in Eden Prairie and other southwest suburbas. New American Academy has been active partners with the Southwest LRT Project Office in engaging their community members (<http://www.newamericanacademy.org/community.html>) in decisions related to alignment, station area planning, and developing the Eden Prairie Town Center development guidelines.**

### **Eden Prairie Alignment:**

AMS supports the Eden Prairie alignment: Adjustments to the proposed light rail alignment and LRT stations, generally from the intersection of Technology Drive and Mitchell Road to the intersection of Flying Cloud Drive and Valley View Road.

Yet with the July 8<sup>th</sup>, 2015 Metropolitan Council Southwest LRT budget decision to defer the Eden Prairie Town Center Station, on opening day a significant environmental justice community in Eden Prairie will be delayed the benefits of this \$1.7 billion public infrastructure investment.

Using EJView, the mapping tool of the Environmental Protection Agency, AMS found that within a 3 square mile area at the Eden Prairie Town Center Station:

- 40% minority
- 42% households under \$50,000
- 65% renters
- 23% under 17 years of age
- 10% 65 years and older\*

\* American Community Survey 2006 - 2010

We chose to look at a broader area than the ½ mile station area circumference to include residential areas south because of the medium density in this suburban city.

## **Equitable Development:**

New American Academy in partnership with Twin Cities Local Initiatives Support Corporation as a Corridors of Opportunity Initiative funded by FTA/EPA/HUD Sustainable Communities developed Eden Prairie Town Center Development Guidelines. See <http://www.corridorsofopportunity.org/activities/LIC/CDI-Plus> for a description of this project. These development guidelines represent the economic opportunities and potential of the Southwest LRT station at Eden Prairie Town Center that would provide great benefits to the significant communities of color in this station area.

New American Academy presented these Eden Prairie Town Center Development Guidelines March 2014 to city council. This guideline was endorsed by the city staff as well as other community developers such Twin cities Lisc. It took almost 6 months to plan, execute and print the final guidelines for the Town Center housing development. The city of Eden Prairie has yet to respond or endorse these development guidelines. Without a station at Eden Prairie Town Center the opportunities to increase affordable housing and jobs for the communities of color will not be realized.

Finally, the RFP of Southwest LRT project include to have affordable housing, jobs and economic development for low-income and people of color. unfortunately, We don't see the possibility of that here in the Southwest.

Sincerely  
Asad Aliweyd, MBA  
Executive Director

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Building better and sustainable future for our communities

# EDEN PRAIRIE TOWN CENTER DEVELOPMENT GUIDELINES

*August, 2013*



## INTRODUCTION

Eden Prairie is a vibrant city known for its desirable housing, excellent business climate, quality schools and outstanding parks. It has been named one of Money Magazine's "Best Places to Live" in America since 2006; the city earned a first place ranking in the 2010 survey. Comprising many large lakes and ponds, the city has more than 170 miles (270 km) of multi-use trails, 2,250 acres (9 km<sup>2</sup>) of parks, and 1,300 acres (5 km<sup>2</sup>) of open space. Previously a bedroom suburb in the 1960s, the city is now home to more than 2,200 businesses and the corporate headquarters. Regionally known for the Eden Prairie Center, it is also the hub for the proposed Southwest Transit corridor. Population has increased 13.4% since 2000, with 62,258 residents in 2012. Part of that growth stems from an increase of Somali and East African families (2010 census data indicates 5.6% black or African American).

One of the proposed Southwest light-rail transit stations will be located in the Town Center area, a primarily commercial district that offers a mix of higher density housing, office and retail space, in close proximity to the Eden Prairie Center. The Town Center area is bordered by Regional Center Road to the south, Flying Cloud Drive to the east, Technology Drive to the north, and a proposed north/south roadway to the west between Costco and Emerson Rosemount. In 2005 - 06 the City of Eden Prairie commissioned a Major Center Area (MCA) study to examine and plan for the future of the area surrounding the Eden Prairie Center. The study was approved by the City Council in as an advisory tool for future redevelopment and public improvements, which recommended developing detailed design guidelines for future buildings, parking ramps, streetscape amenities, pedestrian/bicycle connections and other public spaces for the Town Center area.



With the advent of the light-rail transit investment, the City of Eden Prairie partnered with New American Academy, a community-based organization of Somali and East Africans, and the Twin Cities LISC / Corridor Development Initiative to lead a series of community workshops to explore development options and scenarios to enhance the area, and to elevate the potential for a more transit-oriented and walkable neighborhood. Although the CDI community workshops were open to the general public, special recruitment was made to engage the Somali community, many of whom live in the Town Center vicinity. These development objectives are the result of the community workshops, and serve to inform the future development of the Town Center area.

## ASSETS

### *The City of Eden Prairie:*

- Maintains and enjoys a strong residential market;
- Is home to many businesses that provide quality jobs;
- Offers renowned regional and municipal parks, conservation areas, trails, and recreational facilities that are community centerpieces that attract people of all ages and abilities
- Provides a great place to raise a family, run a business, age in place, and recreate;
- Maintains a strong and diversified tax base, a healthy by a vibrant local business climate with high-quality jobs that provide families with economic security;
- Values diversity and opportunity for its residents; and
- Takes pride in its strong school district.



Above: Examples of the housing, trails, and green space in Eden Prairie.



## GUIDELINES: TOWN CENTER NEIGHBORHOOD

As a future station area along the Southwest Light Rail Transit corridor, the Town Center area is ideal to explore how transit-oriented development could enhance the area by addressing accessibility, livability, and strengthening the pedestrian environment. It will take a strong will by the City of Eden Prairie to set principles for sustainable redevelopment going forward, to guide investment, and measure every project against these principles.

The redevelopment of the area must complement the existing uses in the area, that are largely commercial, residential, and office space. Because there is a large population of Somali families that have located in the area, there was strong interest in the preservation of affordable housing that can accommodate larger families, and to offer economic opportunities for small business entrepreneurs, as well as access to jobs and opportunities throughout the region through close proximity to the regional light rail transit system. The Eden Prairie Major Center Area Study calls for a retail and housing core with a walkable mainstreet, which could incorporate affordable housing for families, seniors, and the growing need for multi-generational housing (<http://www.eden-prairie.org/modules/showdocument.aspx?documentid=359> ).

There is a shared value around the preservation of young families to preserve the high quality of the Eden Prairie schools, and to offer housing options to accommodate all stages of life. The Town Center area offers an important opportunity to create a more concentrated development pattern that would allow for a mix of uses, a mix of incomes, and greater pedestrian access to transit, goods, and services.

Town Center District - Block Exercise Site



## RECOMMENDATION FOR REDEVELOPMENT INCLUDE:

### I. Enhance Opportunities for Mixed-Use and Mixed-Income Projects

- A. Promote mixed-use development that incorporates retail, office, and residential uses;
- B. Provide for a mix of housing options that could accommodate different household sizes (e. g. 3 – 5 bedroom units), configurations, incomes, homeownership and rental, as well as generational diversity;
- C. Incorporate affordable workforce and family housing and affordable commercial space where ever possible to create opportunities for diversity and local small business entrepreneurs.
- D. If government resources are required to fill financial gaps, focus on affordable housing that serves a mix of housing needs (e.g. size of family, seniors), and supports local multi-cultural businesses.
- E. Identify and address existing housing gaps through development opportunities presented through investments along the Southwest LRT corridor (e.g. age, mix of owner and rental, family size, income level, etc.)
- F. Blend into and complement the existing neighborhood.
- G. Consider elements that enhance “indoor-outdoor” experience, such as balconies and screened porches, and courtyards to create open spaces;
- H. Encourage underground parking or structured parking to enhance pedestrian experience;
- I. Ensure economic development opportunities including home ownership opportunities that are culturally appropriate



### II. Create a destination

- J. Enhance the livability of the area for residential uses by strengthening the pedestrian orientation to create greater access to transit, goods, services, and regional amenities (e.g. create a pedestrian overlay to enhance walkable connections throughout the area);
- K. Strengthen or link to natural amenities and places for outdoor recreation;
- L. Include opportunities for youth and family recreation, such as centers that attend to gender specific needs and opportunities;
- M. Incorporate green spaces;
- N. Consider and minimize the ecological impact;
- O. Utilize CPTED (Crime Prevention Through Environmental Design)



principles to promote safety through design of building and public spaces, and engage the community to inform strategies for greater safety and other design features;

- P. Prioritize transit and housing accessibility to accommodate people with disabilities;
- Q. Seek to create alternative education and job training opportunities (e.g. alternative schools, job training for public sector employment, etc.) for young people, families, and adults;
- R. Provide opportunities for intercultural interaction to build stronger community ties;
- S. Incorporate signage and way-finding in multiple languages;
- T. Attract a variety of food and entertainment options;

### **III. Create commercial spaces for small business entrepreneurs to build assets and job opportunities for the local community**

- U. Explore ideas like the Midtown Global Market, Suuqa Karmel, and Urban Bazaar (in San Francisco) to provide opportunities for small business entrepreneurs to locate in the area, serving the local community with culturally specific goods and services.
- V. Consider locations for a farmers market or grocery store that would provide access to healthy foods for people that live in the area.
- W. Encourage a mix of commercial spaces that include small, mid, and large scale commercial users.





**From:** [Kathleen Fix](#)  
**To:** [swlrt](#)  
**Cc:** [kathleen.fix@comcast.net](mailto:kathleen.fix@comcast.net)  
**Subject:** Endorsement of LRT-Done Right's comment on the SDEIS for the SWLRT  
**Date:** Tuesday, July 21, 2015 10:19:25 PM

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To the Met Council:

I am a resident and home owner in Minneapolis and I fully endorse the comments submitted by LRT-Done Right on the SDEIS for the SWLRT.

Kathleen Fix

**From:** [Jacobson, Nani](#)  
**To:** [swlrt](#)  
**Subject:** FW: HC Comments to SWLRT Supplemental DEIS  
**Date:** Tuesday, July 21, 2015 5:10:46 PM  
**Attachments:** [HC Comments Southwest SDEIS July 2015 FINAL.xlsx](#)

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**From:** David J Jaeger [mailto:David.Jaeger@hennepin.us]  
**Sent:** Tuesday, July 21, 2015 3:16 PM  
**To:** Jacobson, Nani  
**Cc:** John Q Doan; Debra R Brisk; Alene G Tchourumoff  
**Subject:** HC Comments to SWLRT Supplemental DEIS

Nani.

Attached are comments from Hennepin County's internal review of the SWLRT's SDEIS report.

We appreciate the chance to provide this input and appreciate all of your hard work on the very important project.

Regards, Dave.

David Jaeger  
Planning, Policy and Land Management | Hennepin County Public Works  
701 Fourth Ave. South, Suite 700, MC L606 | Minneapolis, MN | 55415-1842  
direct: 612-348-5714 | cell: 763-478-7319  
[david.jaeger@hennepin.us](mailto:david.jaeger@hennepin.us)

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## Southwest LRT Supplemental Draft EIS - Review Form

Reviewed by:

John Evans, Chuck Darnell, Kim Zlimen, Kerri Pearce Ruch, Kristy Morter, Katie Walker, Dave Thill, Ali Durgunoglu, Jim Kujawa, Stacey Lijewski, Dave Jaeger

Date: 7/15/2015

Organization: Hennepin County Public Works

Contact Info: [david.jaeger@hennepin.us](mailto:david.jaeger@hennepin.us)

Ch./Sec. Number	Page	Comment	Recommendation
3.1.2.12	3-17	The forecast year for modeling should be updated to 2040 as it is expected to be for the FEIS. This should be made clear and reflected as needed throughout the SDEIS.	
		Due to scope and budget reduction, discussion on segments from Southwest Station to Mitchell Station is no longer applicable - will this document be updated or will that be addressed in the FEIS?	
3.2.1.5	3-55	Ensure that mitigation measures for substantial adverse impacts are fully identified and addressed in the FEIS, as stated that they will be in this section of the SDEIS.	
3.2.2.2	3-60	In the first paragraph under "Agency Coordination", "Hennepin County Conservation District" should be changed to "Hennepin County".	
3.2.2.2	3-59 thru 61	4.70 acres of various types of wetland impacts are proposed in 16 wetlands. WCA Rule 8420.0544 specifies that wetlands impacted by public transportation projects in the seven-county metropolitan area must be replaced in the seven-county metropolitan area or in one of the major watersheds that are wholly or partially within the seven-county metropolitan area, but at least one-to-one must be replaced within the seven-county metropolitan area.	Hennepin County recommends that the one-to-one portion of the replacement should be done in Hennepin County.
3.2.2.2	3-61	Floodplain elevations at Purgatory Creek at Technology Drive have not been established. The floodplain is classified by FEMA as Special Flood Hazard Area (SFHA) Zone A.	Floodplain elevations at SFHA Zone A should be estimated through model studies to determine the exact volumetric impact (not by area) in floodplains.
3.2.2.2	3-63	As shown on Exhibit 3.2-5, approximately 13.4 acres of floodplain within the proposed Eden Prairie improvements would be filled by the proposed improvements. The floodplain impact should be estimated in volume.	Mitigation measures are also explained on page 68. Mitigation must be done according to the local government unit's floodplain ordinance. Mitigation usually requires one-to-one volume replacement and should be hydrologically connected to the impact area.
3.2.2.2	3-65	Public Waters and Stormwater Management	Per new state stormwater treatment guidelines, up to 1.1" of runoff originating from all new impervious surfaces must be abstracted.

3.2.5-B, 3.3.5-B & 3.4.5-B	3-93, 3-129, & 3-212	Outreach to Minority and Low-income Populations references the composition of Community Advisory Committee (CAC). It should be noted that CAC membership includes both Met Council and Southwest Community Works, but could then also include policymakers from cities and Hennepin .	
Table 3.2-18	3-96	Parking Impacts are noted at 250 displacements throughout this section. This suggests correlating parking impacts to better understand actual parking impact as is done in subsequent sections.	
3.2.5	3-98	In Parking section, 4th sentence, LPS should be LPA	
3.3.1.1	3-102	The county disagrees with the statement that the OMF would not "influence growth patterns and neighborhood characteristics on adjacent land". The OMF could be within sightlines of the station and future redevelopment along 17th Avenue in Hopkins and Minnetonka, which would have an indirect impact on these areas.	
3.3.1.1	3-104	Under "Mitigation Measures" - visual impacts of OMF and its operations should be addressed. Mitigation should include measures similar to those being used at other identified locations such as landscaping, visual treatments, and continuity with LRT structure designs.	
3.3.2	-	While technically part of the Shady Oak station and not the Hopkins OMF site, what, if any, additional environmental impacts might be realized by the addition of 300+ temporary parking stalls on the property to the east of the OMF?	
3.3.2.2	3-111	0.7 acres of type 3 wetland will be impacted.	Hennepin County recommends that the one-to-one portion of the replacement should be done in Hennepin County.
3.3.2.2	3-112	Approximately 0.61 acre of MnDNR-mapped floodplain would be filled as a result of the proposed Hopkins OMF. Type of floodplain designation needs to be specified, the impacts must be measured in terms of volume and replaced according to MDNR and local regulations.	Mitigation should be hydraulically connected to the impact area.
3.3.2.2	3-112	Public Waters and Stormwater Management	Per new state stormwater treatment guidelines, up to 1.1" of runoff originating from all new impervious surfaces must be abstracted.
Table 3.3-9	3-130	Table lists acquisitions and displacements. Will this number be updated to reflect additional acquisitions disclosed in Spring 2015? And if so, does that change the finding of no impact on EJ populations?	

3.3.2.3	3-117	1st paragraph, last sentence - add petroleum waste to list, since this is a separate category pursuant to federal statutes.	
3.3.2.3 B.	3-117	Given the contamination issues and the proximity of the methane source (landfill), vapor mitigation features may need to be incorporated into the OMF buildings.	
3.3.2.3 B.	3-119	Soil vapor samples, analyzed for volatile organic compounds, should be a part of Phase II investigations since the landfill and other high risk sites could be sources of these compounds as well.	
3.3.2.3 C.	3-120	Vapor barriers and venting systems may need to be part of the Mitigation Measures depending on soil vapor sampling results.	Given the proximity of the potentially significant methane source (landfill), it may be prudent to install a vapor mitigation system as part of the building, regardless of soil vapor sampling results, should vapor conditions change over time. It is cheaper to incorporate such as system during building construction than to retrofit an existing building.
3.3.4.1		In Existing Conditions section Excelsior Avenue should be changed to Excelsior Boulevard.	
3.4.1.5	3-168	Ensure that mitigation measures for substantial adverse impacts are fully identified and addressed in the FEIS, as stated that they will be in this section of the SDEIS.	
3.4.2	3-181	Figure 3.4-6, moderate and severe noise impacts north of the Kenilworth channel are overlapping on the map and difficult to read at this scale.	Perhaps an inset could be provided since this doesn't appear to be addressed in greater detail in Appendix H: Noise and Vibration Memoranda either?
3.4.2.2	3-173	0.5 acres of various types of wetlands will be impacted.	Hennepin County recommends that the one-to-one portion of the replacement should be done in Hennepin County.
3.4.2.2	3-176,177	Public Waters and Stormwater Management	Per new state stormwater treatment guidelines, up to 1.1" of runoff originating from all new impervious surfaces must be abstracted.
3.4.2.1 B.	3-170	Since the impact to lake levels has been raised as a concern with regard to the tunnel, it may be worthwhile to compare the 190,000 gallons/year pumping rate to the overall lake volumes, which should demonstrate that the pumping rate is miniscule compared with lake volumes. Another approach would be to compare the tunnel area to the recharge area for the lakes.	

**From:** [sbull10152@aol.com](mailto:sbull10152@aol.com)  
**To:** [swlrt](#)  
**Subject:** I endorse the comments by LRT done right!  
**Date:** Tuesday, July 21, 2015 8:20:48 PM

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The project has been a waste of tax payer money. Its time to walk away and spend the federal and state taxes in a way that benefits the tax payer. The project should be scuttled.

Stephen Bullard  
Minneapolis

From: [Brian Gaiser](#)  
 To: [swlrt](#)  
 Subject: Just don't do it  
 Date: Tuesday, July 21, 2015 2:27:40 PM

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I live in Bryn Mawr just north of 394 and use the Kenilworth Corridor almost every day commuting by bike to work in Bloomington. I recreate in the corridor as well on the numerous lakes and trails. The disgraceful decisions that have been made to this point allowing a) co-location of freight and the b) irreversible environmental impacts of the Kenilworth corridor need to be reckoned with.

I moved to Minneapolis from Portland, Oregon because of this city's unsurpassed park system. This project **WILL DESTROY** the SINGLE BEST PART of the Minneapolis Park System.

Whatever you need to do to change the current chain of events - then do it. Including putting a **full-scale stop to the SWLRT until agreements can be made to move it out of the corridor.**

Brian Gaiser  
 621 Queen Aves S  
 Minneapolis

From: [Susu](#)  
To: [swlrt](#)  
Cc: [STUART CHAZIN](#); [Mary \(LRTDR\) Pattock](#); [George Puzak](#)  
Subject: Letter supporting LRTDR comments on SDEIS  
Date: Tuesday, July 21, 2015 6:30:18 PM

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# FRIENDS OF COLDWATER

**10,000-year-old Sacred Spring—GREEN MUSEUM—Birthplace of Minnesota**

1063 Antoinette Avenue Minneapolis MN 55405-2102 612-396-6966  
[www.friendsofcoldwater.org](http://www.friendsofcoldwater.org) [info@friendsofcoldwater.org](mailto:info@friendsofcoldwater.org)

July 21, 2015

Ms. Nani Jacobson, Project Manager  
Southwest Light Rail Transit Project Office  
6465 Wayzata Blvd., Suite 500  
St. Louis Park, MN 55426  
[SWLRT@metrotransit.org](mailto:SWLRT@metrotransit.org)

Dear Ms. Jacobson,

I am contacting you as a spokesperson for Friends of Coldwater, a Minnesota non-profit NGO dedicated to educating citizens to protect our water commons.

In addition to the Friends of Coldwater comments on the SWLRT SDEIS we endorse and support the comments submitted by Light Rail Transit Done Right (LRTDR).

Please add this letter to the record of comments on the Southwest Light Rail Supplemental DEIS.

Sincerely,  
Susu Jeffrey

*Before it was a historic site, Coldwater was a sacred site.*  
**Friends of Coldwater is a Minnesota Non-Profit Organization**



**From:** [John Harvey](#)  
**To:** [swlrt](#)  
**Subject:** Letter to be included in in SDEIS Comments for the SWLRT Project  
**Date:** Tuesday, July 21, 2015 4:59:56 PM  
**Attachments:** [Response for the record on the SDEIS for SWLRT proposal 7-21-15.pdf](#)  
**Importance:** High

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Dear Ms. Jacobson and other members of the SWLRT Project Office.,

I've attached a PDF of my endorsement which I request you include in the Public Comments concerning the proposed SWLRT project

Thank You,

John H Harvey

Please let me know that you've received this comment endorsement.

J.H.

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This email has been checked for viruses by Avast antivirus software.  
<https://www.avast.com/antivirus>

From: John H Harvey  
2837 west 28<sup>th</sup> Street  
Minneapolis, MN 55416

July 21<sup>st</sup>, 2015

Ms. Nani Jacobson, Project Manager  
Southwest Light Rail Transit Project Office  
6465 Wayzata Blvd., Suite 500  
St. Louis Park, MN 55426

Via email: [swlrt@metrotransit.org](mailto:swlrt@metrotransit.org)

Dear Ms. Jacobson,

I am writing to you as a Citizen and a Resident of the Cedar Isles Neighborhood to let you know that I've read the Supplemental DEIS for the proposed Southwest Light Rail plan and must agree with the comments submitted by **Light Rail Transit Done Right (LRTDR)**.

Please add my letter to the record of comments on the Southwest Light Rail Supplemental DEIS.

Sincerely,

John H Harvey

P.S. I'd also appreciate it if you would make available all the other Public Comments submitted to you over the years at and after "Listening" Meetings sponsored by the Met Council concerning all aspects of this project.

J.H.

P.P.S. Please let me know via Email that you've received this Comment indorsment.

J.H.

**From:** [Jody Strakosch](#)  
**To:** [swlrt](#)  
**Subject:** LRT Done Right - SDEIS Comments  
**Date:** Tuesday, July 21, 2015 5:11:37 PM

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To Whom It May Concern,

As a Minneapolis resident, I am writing to let you know that I fully endorse and support the comments submitted by LRT Done Right. Our neighbors have spent hours working on these comments and I hope you will take them into full consideration.

Sincerely,

Jody Strakosch  
2200 Newton Ave South  
Minneapolis, MN 55405

**From:** [Heather Haakenson](#)  
**To:** [swlrt](#)  
**Subject:** LRT done right  
**Date:** Tuesday, July 21, 2015 7:48:04 PM

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Met council,

As a proud Minneapolis citizen I endorse the LRT done right comments regarding the SDEIS. Protecting our green space and iconic chain of lakes is vital to the long term beauty and health of our city. Our forefathers had amazing foresight in planning and protecting these spaces. Let's not destroy what they worked so hard to create.

Sincerely  
Heather Haakenson

Sent from my iPhone

**From:** [Lisa Nankivil](#)  
**To:** [swlrt](#)  
**Subject:** LRT Done Right  
**Date:** Tuesday, July 21, 2015 4:30:02 PM

---

As a Kenwood resident and trail user for recreation and work commute I support the objections brought to the current status of co-location. This alignment is ill planned and potentially dangerous. No co-location! Move LRT to a different route that doesn't disturb the environment!

Thank you for your attention to this matter,

Lisa Nankivil

**From:** [David M. Lilly, Jr.](#)  
**To:** [swlrt](#)  
**Subject:** LRT Done Right Comments to SWLRT SDEIS  
**Date:** Tuesday, July 21, 2015 3:29:41 PM

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Dear Ms. Jacobson,

I wish to inform you that I fully support and endorse the comments about the SDEIS covering the SWLRT submitted by *LRT Done Right* under cover of letter from Mary Pattock dated today. Having participated in the drafting of this document I am fully informed about the details of these highly informed comments.

Sincerely,

David M. Lilly, Jr.  
612 280-2755  
[dlilly@danburygroup.com](mailto:dlilly@danburygroup.com)

**From:** [Barb Rasmus](#)  
**To:** [swlrt](#)  
**Subject:** LRT Done Right comments  
**Date:** Tuesday, July 21, 2015 8:28:43 PM

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I would like to go on record for endorsing the Comments submitted by LRT Done Right regarding the SDEIS in reference to the SWLRT. It is unconscionable to continue to pursue this path in the face of all that is known (and not yet known). PLEASE be responsible, do the right thing, and suspend this commitment to endangering and likely destroying one of the most treasured areas of the Cities.

Barb Rasmus

Sent from my iPad

**From:** [Marion Collins](#)  
**To:** [swlrt](#)  
**Subject:** LRT done right statements  
**Date:** Tuesday, July 21, 2015 9:59:09 PM

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I endorse and agree with the statements made by LRT Done Right. I live with 4 small children about 5 yards from the tracks, and am in the Blast Zone. Our house is by a crossing where no mitigation for bells/horns has been made. I hope you will sincerely look at these statements and take a step back from the project to consider what is really best for the environment and Minneapolis citizens. This route does not go through dense areas where there are lower-income families, nor close to businesses that would benefit from mass transit. And this route is environmentally detrimental and dangerous with co-location of freight. Our family sincerely hopes you will take into account the facts put before you by LRT Done Right and listen to the citizens you are suppose to represent.

Sincerely,  
Marion Collins



**From:** [Charles Gribble](#)  
**To:** [swlrt](#)  
**Subject:** LRT done right  
**Date:** Tuesday, July 21, 2015 10:02:37 PM

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We support the comments sent to your attention.

Chuck Gribble  
Edith Black  
1988 Sheridan Av. S  
Mpls 55405

Sent from my iPad

**From:** [Shelley Fitzmaurice](#)  
**To:** [swlrt](#)  
**Subject:** LRT Done Right's Comments to the SDEIS  
**Date:** Tuesday, July 21, 2015 11:01:58 PM

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I have read and fully endorse the comments submitted today by the grassroots organization, LRT Done Right, especially the concerns about the safety issues that would result from co-location of freight rail and light rail in the Kenilworth corridor.

The SWLRT should not go forward with co-location! Remove the freight or reroute the SWLRT!,

Shelley Fitzmaurice

Sent from my iPad

**From:** [Saario, Terry \(MIN-CML\)](#)  
**To:** [swlrt](#)  
**Subject:** LRT-Done Right comments on the SDEIS  
**Date:** Tuesday, July 21, 2015 3:11:50 PM

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My husband, Lee Lynch, and I are writing to endorse the comments submitted by the LRT-Done Right citizen group. This group has seriously examined the SDEIS and respectfully submits its comments for your critical examination and consideration. Terry Saario, 34 Park Lane, Minneapolis, MN, 55416

**From:** [Allwood, Paul \(MDH\)](#)  
**To:** [swlrt](#)  
**Cc:** [Kelly, James \(MDH\)](#); [Bell, David \(MDH\)](#); [Ehlinger, Ed \(MDH\)](#)  
**Subject:** MDH Comments  
**Date:** Tuesday, July 21, 2015 5:10:02 PM  
**Attachments:** [MDH Comment Letter South West LRT SDEIS.pdf](#)

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MDH comments are hereby submitted on the SW LRT SDEIS. Please contact David Bell if you have questions. Regards,

Paul Allwood  
Assistant Commissioner  
Minnesota Department of Health  
Phone: 651-201-5711

Administrative Assistant  
Toni Gillen  
651-201-4817  
[Toni.Gillen@state.mn.us](mailto:Toni.Gillen@state.mn.us)



*Protecting, maintaining and improving the health of all Minnesotans*

July 21, 2015

Nani Jacobson  
Assistant Director, Environmental and Agreements  
Metro Transit – Southwest LRT Project Office  
6465 Wayzata Boulevard, Suite 500  
St. Louis Park, MN 55426

Dear Ms. Jacobson,

Thank you for providing the Minnesota Department of Health (MDH) with the opportunity to comment on the Supplemental Draft Environmental Impact Statement (SDEIS) for the Southwest Light Rail Transit project (SW LRT).

Health begins in the environments where we live, learn, work, and play. Transportation projects, such as highways, public transit and sidewalks, shape these environments. The Southwest Light Rail Transit project offers real potential to improve health for communities living near transit stations. People from all over the region who travel on the light rail line could also benefit. The new transitway could have health benefits for communities by improving physical activity levels, job access, housing and transportation costs, traffic safety, education access, and access to healthy food.

The following comments highlight these areas of potential health improvement and MDH also wants to stress that a project of this magnitude must be planned carefully so as to maximize these potential benefits.

#### **Health Equity**

- ❖ Research indicates that 60% of our health status is influenced by social and environmental conditions and only 10% is influenced by health care<sup>1</sup>. Access to transportation is one of the social and environmental conditions that influence health. Ensuring equal access to the SW LRT for all people will help maximize the potential health benefits resulting from this project.
- ❖ In Hennepin County, low-income communities and communities of color have higher rates of preventable health problems such as obesity and type II diabetes than do

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<sup>1</sup> Schroeder, S. A. (2007). We can do better—improving the health of the American people. *New England Journal of Medicine*, 357(12), 1221-1228.

whites and higher income populations. These differences in health are the result of a wide set of forces: economics, social policies, politics, and our built environment. It is important that the health-promoting benefits of the transitway reach low income communities and communities of color. This is particularly important along the Eden Prairie segment of the SW LRT where these communities are more concentrated along the proposed route than in greater Eden Prairie and Hennepin County. The health impacts of the SW LRT on these populations will depend on efforts to ensure that these communities have a healthy environment in which to live, learn, play, and work and this includes ensuring their access to light rail.

- ❖ Transportation planning and land use regulations need to be designed carefully to ensure that everyone benefits, including low income people and people of color. However, if planned poorly, research has shown that transit investments can result in more expensive housing, more wealthy residents, and higher vehicles ownership, all of which can price out core transit users, such as renters and low-income households.

#### **Economics and Jobs**

- ❖ Land use changes toward higher density and mixed-use development promotes job growth and economic opportunity along the SW LRT route. When people have quality jobs that provide a living wage they tend to live longer and have better physical and mental health. Many factors affect whether a person is employed and what type of job they have. One of those factors is transportation.
- ❖ The SW LRT should help make transportation more affordable because neighborhoods with access to transit, walkable streets, and a variety of services have lower transportation costs. Households that have lower transportation costs have more left over in their budgets for resources that promote health like nutritious food and health care. Budgets that are less burdened by transportation costs can also help to reduce stress and prevent homelessness.

#### **Housing**

- ❖ New fixed rail transit investments tend to lead to greater housing demand and increased land values around revitalized transit stations. While this can lead to an increase in housing options and economic benefits, it also creates the potential for rents and housing costs to rise, potentially leading to the involuntary displacement of low-income residents. This may disproportionately affect persons of color along the transit route, who are statistically more likely to be low-income than whites. Displacement can have several negative health outcomes, including increases in infectious disease, chronic disease, stress, and impeded child development.

- ❖ Increases in rent and home costs along the SW LRT route could lead to a decrease in racial diversity. Due to the racial income gap in the Twin Cities, incoming households that will be able to afford higher home prices along the route will likely be white. Preserving existing affordable housing and supporting the development of new affordable and mixed-income housing near transit locations could help ensure transit-dependent, minority and low-income communities have access to the new SW LRT line and ultimately experience improved health. This appears to be particularly important along the Eden Prairie segment of the SW LRT as both minority communities and low-income communities are higher here than in greater Eden Prairie and Hennepin County.

#### **Education Access**

- ❖ The SW LRT will bring riders close to Dunwoody College of Technology and Minneapolis Community and Technical College as well as other educational and vocational training institutions in the project area. When people have more education they have better chances of securing jobs that pay well and do not expose them to dangerous or unhealthy conditions. They also gain knowledge and skill that help them access health information and resources. The Health Impact Assessment for the Bottineau Transitway<sup>2</sup> reported that some students living in Hennepin County find that limited car access and high transportation costs are barriers to attending college. The SW LRT could assist by eliminating this barrier for some prospective students living or attending schools along this proposed route.

#### **Accessibility/Physical Activity**

- ❖ Exercise is vital for good health; however, about half of adults and three-quarters of children living in Hennepin County do not get recommended levels of exercise<sup>3</sup>. Research shows that streets that are safe and comfortable for pedestrians and bicyclists encourage people to get exercise as part of their daily routine.
- ❖ Transit accessibility is especially critical for lower-income residents and other transit dependent populations who rely on transit to access their basic needs including work, groceries, and medical care. In Hennepin County it is estimated that people of color are twice as likely as whites to rely on public transportation for their work commute<sup>4</sup>.
- ❖ The SW LRT could lead to increases in ridership, residents, and commercial destinations along this new route. This increase in density along the route could cause vehicular traffic to surge and, when combined with the increase in ridership, these factors could

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<sup>2</sup> 2013 Hennepin County Bottineau Transitway Health Impact Assessment:  
<http://www.hennepin.us/~media/hennepinus/residents/transportation/bottineau-transitway/HIA%20Full%20Report%20Final%2012192013.pdf>

<sup>3</sup> From Hennepin County 2010 SHAPE survey: <http://www.hennepin.us/SHAPE>

<sup>4</sup> Combined from commuting statistics for race/ethnicity of individuals in the 2009-2013 American Community Survey 5-year Estimates for Hennepin County: [http://factfinder.census.gov/faces/nav/jsf/pages/guided\\_search.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/guided_search.xhtml)

put pedestrians and cyclists at a greater risk for injuries related to collisions. Therefore, pedestrian infrastructure and bicycle connection improvements are an important consideration throughout the SW LRT route. Such improvements not only help ensure ease of use but also provide health benefits by encouraging people to be active and through improved safety.

- ❖ A new light rail line is only one piece of a neighborhood transportation system and it is also necessary to promote the use of, and access to, successful bus service and bicycle and pedestrian infrastructure for a truly sustainable transportation system.

#### General Comments

- ❖ Two Health Impact Assessments (HIAs) have been completed for other sections of the Twin Cities metro transit light rail lines. These HIAs provide valuable information about transportation projects of this scale and scope and describe how light rail transit contributes to the health and well-being of many different populations. The Bottineau Transitway HIA<sup>5</sup> and the Central Corridor HIA<sup>6</sup> can both be accessed on-line and MDH encourages the Metropolitan Council to consult these resources when making project decisions for the SW LRT.
- ❖ Transit oriented development, such as light rail transitways, can benefit communities by providing opportunities for people to live, work, and play without having to get into a car. This can reduce roadway congestion and air pollution, it can increase physical activity and provide access to jobs and other opportunities for transit dependent households.
- ❖ Investments in station areas and an increase in residents along the SW LRT route could encourage the placement of grocery stores nearby. When people have access to healthy food options they are better able to include healthy food in their diets. Good nutrition is vital to health, disease prevention, and childhood development.

Health starts where we live, learn, work, and play. To create and maintain healthy Minnesota communities, we have to think in terms of health in all policies. Thank you again for the opportunity to provide comments on this Supplemental Draft Environmental Impact Statement for the Southwest Light Rail Transit project. Feel free to contact David Bell at (651) 201-4907 or [david.bell@state.mn.us](mailto:david.bell@state.mn.us) if you have any questions regarding this letter.

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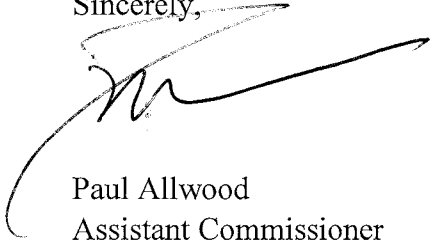
<sup>5</sup> 2013 Hennepin County Bottineau Transitway Health Impact Assessment:  
<http://www.hennepin.us/~media/hennepinus/residents/transportation/bottineau-transitway/HIA%20Full%20Report%20Final%2012192013.pdf>

<sup>6</sup> 2011 Healthy Corridor for All:  
[http://www.policylink.org/sites/default/files/HEALTHYCORRIDOR\\_SUMMARY\\_FINAL\\_20120111.PDF](http://www.policylink.org/sites/default/files/HEALTHYCORRIDOR_SUMMARY_FINAL_20120111.PDF) M.2-553



Nani Jacobson  
Southwest Light Rail Transit  
Page 5  
July 21, 2015

Sincerely,

A handwritten signature in black ink, appearing to be 'PA', with a long horizontal stroke extending to the right.

Paul Allwood  
Assistant Commissioner  
Minnesota Department of Health  
PO Box 64975  
Saint Paul, MN 55164-0975

**From:** [Jacobson, Nani](#)  
**To:** [swlrt](#)  
**Subject:** FW: Minneapolis SDEIS comments  
**Date:** Tuesday, July 21, 2015 5:05:38 PM  
**Attachments:** [DOC071715-07172015154842.pdf](#)

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-----Original Message-----

From: Pflaum, Donald C. [<mailto:Donald.Pflaum@minneapolismn.gov>]  
Sent: Tuesday, July 21, 2015 3:13 PM  
To: Lamothe, Craig; Jacobson, Nani  
Cc: Miller, Paul D.; Hager, Jenifer A; Jack Byers  
Subject: Minneapolis SDEIS comments

Craig/Nani,

Please see the attached SDEIS comments from the City of Minneapolis. You should also be receiving the attached letter via US mail.

Thanks

-Don  
612-673-2129

7/16/2015

Nani Jacobson  
Assistant Director, Environmental and Agreements  
Metro Transit Southwest LRT Project Office  
6465 Wayzata Blvd.  
Suite 500 St. Louis Park, MN 55426

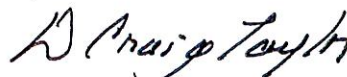
Dear Ms. Jacobson,

The City of Minneapolis appreciates the ability to comment on the Supplemental Draft Environmental Impact Statement for the Southwest LRT Corridor (Green Line Extension) project. The attached comments were presented to the Transportation and Public Works Committee of the Minneapolis City Council on July 14, 2015 and will be approved by the full City Council on July 24, 2015. Please let our staff know if you have any questions regarding the comments.

Sincerely,



Steven A. Kotke  
Director of Public Works



D. Craig Taylor  
Director of Community Planning and  
Economic Development

**Attachment #2 - SW LRT  
Supplemental Draft Environmental  
Impact Statement Comments  
City of Minneapolis  
June 2015**

City of Minneapolis comments pertaining to the SW SDEIS are split into two categories; general comments that highlight the City of Minneapolis position on a particular topic and specific comments that include more technical detail. Specific comments pertain to a given chapter or page within the SDEIS document.

City of Minneapolis comments on the Supplemental DEIS are based on three principles:

1. Comments are based on unresolved topics and the need to clarify, correct, or mitigate an issue in preparation for the FEIS. Comments are also intended to inform the final design, project specifications, construction means/methods, and long-term operation of the line. The City will not be commenting again on past decisions such as LRT alignment, freight alignment, or scope/budget. **The City's perspective has been captured in previous council actions including the municipal consent resolution adopted on August 29, 2014.**
2. Comments are based on the SDEIS, but also reflect the city's understanding of recent changes to the scope and budget recommendations made by the July 1, 2015 Corridor Management Committee meeting and adopted by the Metropolitan Council on July 8, 2015.
3. The City of Minneapolis continues to support the **Southwest LRT** project **contingent on adherence to the Memoranda of Understanding reached between the City of Minneapolis and Met Council and between the City of Minneapolis and Hennepin County, both of which were adopted on August 29, 2014.** Comments are intended to lessen the negative impacts to residents and businesses near the corridor and to improve the quality of the project.

It should be noted that these comments are supplemental to the previously submitted December 2012 City of Minneapolis DIES comments and to the August 2013 City of Minneapolis SDEIS scoping letter to the Southwest Project Office.

The city appreciates the work of the Metropolitan Council to address the concerns that the city has raised to date. The City of Minneapolis will continue to work closely with the Southwest LRT Project Office and with other partnering agencies to help make this project a long-term success.

**General Comments:**

Below are several general comments pertaining to the SDEIS. These topics require further analysis, clarification, or detail and need to be addressed prior to the completion of the FEIS:

**Ridership** – It is difficult to understand station ridership data in this document. It is very time consuming to cross-reference data between the original DEIS and the SDEIS. Data is often

presented, compared, and contrasted in different baseline and forecast years. It would be helpful for the document to include a large table that shows accurate ridership values for each station. The data needs to be based on the latest regional model and the table needs to include opening day (2020) projected ridership, 2040 projected ridership, reverse commute ridership, new transit trips, and transit dependent user ridership.

Construction Impacts – Construction impacts pertaining to the shallow tunnel design such as noise and vibration are discussed in the SDEIS. The SDEIS states that “Construction noise impacts are expected to be localized, temporary, and transient.” While in general this may be true, the document minimizes and understates impacts of the shallow tunnel to residents. While the City of Minneapolis recognizes that additional design work and construction methods will better inform the extent of these impacts, the known impacts should be better identified in the SDEIS. These impacts will increase with proximity to the physical improvements. It is understood that additional details regarding potential short-term noise impacts will be evaluated further and provided in the forthcoming FEIS, based on the equipment, duration, and type of work effort. These details and the respective short-term impact determinations need to be provided when additional design and construction information is available not when the FEIS is published.

Given the close proximity of homes and townhomes to the construction work, effort must be made to dampen or minimize the noise and vibration caused by sheet pile driving. There will also be tree loss along the corridor. The means and methods for removing trees are not defined in the DEIS. It should be noted that there is concern about potential noise created by chain saw activity in addition to wood chipping. Hours of construction operation must be limited to ensure that residents are not disrupted at night; the City of Minneapolis Noise Ordinance will be enforced restricting hours of operation on week nights, weekends, and Holidays.. In addition to noise and vibration, light pollution must be considered when securing the project at night. An effort must be made by the project and its contractors to control dust, to maintain safe truck routes, to comply with truck weight limits, and to follow jake breaking laws.

The project needs to identify proper mitigation for properties impacted by construction. The project needs to develop and implement a construction management plan that addresses hours of operation, access routes, BMPs for mitigating dust and debris on public streets and private property. The City of Minneapolis would like to be consulted in the development of this plan.

Shallow Tunnel; Environmental Issues – Mitigation will be required for adverse impacts to City of Minneapolis surface waters, storm drains, storm tunnels, sanitary sewers, and surface drainage, including but not limited to physical conflicts, pollutant loads, surface water levels, increased stormwater runoff, changes to surface drainage impacting public or private properties, or degradation of hydraulics, condition, capacity, or operational/maintenance access. There needs to be a section in the FEIS on the impact to the tunnel on existing utility infrastructure and what mitigation will be provided.

Freight Rail Safety - There must be coordination between the SPO and the railroad to minimize the risk of a derailment, especially if trains are carrying hazardous materials. Emergency vehicle access of the construction site must be coordinated prior to construction. The SPO shall include

both the Minneapolis Fire Department and the Police Department in future Emergency Response planning for both the construction period and long term operations. Members of the public have expressed great concern regarding the risks of a train derailment during construction. The SDEIS needs to address these risks.

LRT Operation - The document states that there will be emergency vehicle delays of approximately 50 seconds, 12 times per hour at 3 at-grade locations within Minneapolis and St. Louis Park once the LRT opens for service. Alternate routes for emergency vehicles may need to be suggested. The SPO shall include both the Minneapolis Fire Department and the Police Department in future Emergency Response planning for both the construction period and long term operations. The City of Minneapolis is pleased that improvements to the tunnel ventilation system will be made to ensure passenger safety. As previously stated in the DEIS comments, it is important that noise from LRT bells, whistles, and horns be evaluated and minimized. While some warning devices are required by federal law, policies and procedures regarding some rail operations are local (at the discretion of the Metropolitan Council).

Visual Impact - The City of Minneapolis agrees that the project will result in a substantial level of visual impact in the Kenilworth corridor. The impact must be mitigated and the corridor improved in the manner described in the memorandum of understanding between the Metropolitan Council and the City of Minneapolis. The City looks forward to continued conversations with the project office and the community regarding the restoration of the corridor, and expects these measures to be included in the FEIS and implemented by the project.

Regional Transit Connections – A significant amount of work has occurred within the region to advance other transit projects since the DEIS was published in 2012. This includes the Midtown Greenway Corridor, which was the subject of an Alternatives Analysis document. This project needs to be discussed more within the SDEIS since track accommodations at the West Lake Street station have been made for that project. The Lake Street ABRT project was also identified as part of that study and makes a direct connection to the Green Line at West Lake Street. The C-Line along Penn Avenue has also advanced to the design phase. As proposed, customers using the C-Line can transfer to the Green Line at the proposed Royalston Avenue Station. Proposed bus connections at the Van White station and improved sidewalks near the Penn Station will also help transit dependent riders get to destinations along the entire Green Line travelshed. Mention of these projects within the SDEIS would be helpful.

### **Specific Comments (By Chapter):**

#### **Executive Summary**

Table ES-1 on page ES-15 states that there are 67 moderate and 3 severe noise impacts. More information is needed on how these properties will be mitigated.

Table ES-1 on page ES-16 states that 6 high-risk environmental sites could require remediation prior to construction, that there could be potential spills during construction, and that sites with existing contamination could be encountered during construction. More information is needed regarding the identified sites and what will be done (and how long it takes) to remediate a site or situation.

## Chapter 1 –Purpose and Need

Page 1-1 – “The Southwest LRT Project will improve access and mobility to the jobs and activity centers in the Minneapolis central business district, as well as along the entire length of the corridor for reverse-commute trips to the expanding suburban employment centers.” When looking at the FTA’s 2014 response to the SW Corridor scope, suburban land use was one of the areas identified for improvement. By increasing corridor density, the project will become more competitive at the federal level. As mentioned in the general comments, calculating the number of reverse commute riders is an important equity measurement that needs to be shown in a table station by station.

## Chapter 3 –Affected Environment, Impacts, and Mitigation

Section 3.4.1.5 (Visual Quality and Aesthetics) analyzes the anticipated changes to visual quality from six viewpoints between the West Lake Street and 21<sup>st</sup> Street stations. The SDEIS assigns a substantial level of impact for three of these:

- Viewpoint 2, looking north near Lake Street
- Viewpoint 3, looking north toward the tunnel portal south of the canal crossing
- Viewpoint 4, view from the bike trail at the south side of the channel crossing

The City of Minneapolis agrees that the project will result in a substantial level of visual impact in these areas. The impact must be mitigated and the Kenilworth corridor improved in the manner described in the memorandum of understanding between the Metropolitan Council and the City of Minneapolis. The City looks forward to continued conversations with the project office and the community regarding the restoration of the corridor, and expects these measures to be included in the FEIS and implemented by the project.

The City of Minneapolis has the following concerns about visual quality and aesthetics not covered in the SDEIS:

- The drawings and discussion of the tunnel portal near the channel do not acknowledge that among the substantial visual impacts are a six-foot concrete crash wall adjacent to the freight tracks and an eight-foot fence between the portal and the bike trail. The FEIS should state these facts explicitly and include a level of mitigation that is commensurate with the substantial level of impact.
- While the SDEIS includes an analysis of the area around the tunnel portal near the channel, it does not discuss the tunnel portal near Lake Street. The City of Minneapolis expects that equal attention will be given to the mitigation of visual impacts at both tunnel portals.
- The project will substantially impact visual quality and aesthetics between the 21<sup>st</sup> Street and Penn Avenue stations, but an analysis of that impact is not included in the main body of the SDEIS. Previous work by the Metropolitan Council quantifies the anticipated tree loss in the Kenilworth corridor under the since-discarded two-tunnel option. Tree loss and a change to aesthetics will remain an issue with the construction of LRT at grade in this segment, and the City of Minneapolis expects the same level of restoration and improvement in this segment as the West Lake to 21<sup>st</sup> segment.

Section 3.4.2.3 (Noise) and Section 2.4.2.4 (Vibration) identifies both severe and moderate noise and ground-borne noise impacts in the Kenilworth corridor. The City of Minneapolis expects both severe and moderate noise and ground-borne noise impacts to be mitigated. We look forward to working with the project office on the development of these mitigation measures.

Page 3-12- It is not clear whether all relevant noise issues will be covered in the FEIS document. It is important to be clear about what studies are remaining in addition to what has been done to date.

Page 3-17- The SDEIS uses 2030 model information when the CMC and staff have been using projected 2040 model numbers to make decisions. It is important that the SDEIS include the 2040 data to help justify the context of these decisions.

Page 3-18- The operating assumption has always been that 7.5 minutes headways will be used. It is clear now that 10 minute headways will be used to match Central Corridor frequency. The SDEIS needs to state whether or not 7.5 minute headways will work in the future.

Page 3-20 - "As noted in Section 2.5 of this Supplemental Draft EIS, the LPA would result in short-term and long-term shifting of the freight rail tracks prior to tunnel construction in the Kenilworth Corridor. Changing the physical operations of freight railroads can result in community impacts such as running freight trains at night. While TCW is allowed to operate at night; they currently choose to run during the day. They also choose to run at 10 mph instead of 25 mph. It is important that the agency partners continue to work with the railroad to try to minimize the number of night trains they run and the frequency and speed of those trains to maintain quality of life for residents.

Page 3-21 Freight Table 3.1-5 - It should be noted that noise and vibration analysis modeling was done using 10mph vs 25mph. We support that assumption since that is the current operating speed of trains in the corridor.

Pages 3-23 Table 3.1-6 – This table identifies many upcoming mitigation elements not included in the SDEIS. The City of Minneapolis is very interested in reviewing and commenting on all future plans and mitigation efforts identified in the DEIS and SDEIS prior to the issuance of the FEIS, these include but are not limited to:

- Construction Communication Plan
- "Forthcoming aesthetic guidelines"
- Groundwater Management Plan
- Noise Mitigation Plan
- Vibration Mitigation Plan
- Section 106 review

Page 3-26 Bicycle & Pedestrian - "Because there would be no long-term adverse impacts from the LPA on bicycle and pedestrian facilities, no long-term mitigation measures have been identified" Given that the Cedar Lake Trail Bridge has been eliminated from the project scope, it is important to mitigate any risks associated with crossing three rail tracks (two light rail tracks



and one freight rail track). It is recommended that gate arms be considered at the trail crossings give the high trail counts.

Page 3-27 Environmental Justice. The DEIS used 2000 Census data and the SDEIS uses the American Community Survey (ACS) from 2007-2011 to identify low income populations. More recent ACS data is available 2009-2013. The City of Minneapolis suggests that the most recently available data is used to determine environmental justice compliance.

Page 3.135 – Table 3.4-1, Summary of Findings: For the Public Waters and Stormwater Management Sub-category of the Water Resources Category, please add, Stormwater runoff would be treated to meet local requirements.

Page 3-136 Section 3.4.1.1 Land use . The list of planning documents consulted to inform the Land Use section does not include The Minneapolis Plan for Sustainable Growth (2009), the City's Comprehensive Plan. It also does not include the Midtown Greenway Land Use and Development Plan (2007). These plans provide general and site specific guidance for land use and development intensity in Minneapolis. The City of Minneapolis is concerned that the oversight in listing the plans equates to an oversight in reviewing the plans and understanding their relevant recommendations. This impacts the Land Use and Economic impacts analysis in the SDEIS. The City of Minneapolis requests that these documents and their relevant guidance be reviewed and considered where relevant in the FDEIS.

Page 3-138 – The City of Minneapolis does not support park and rides within the city limits. The City of Minneapolis appreciates the attention the SPO staff has given to bicycle and pedestrian infrastructure approaching each of the Minneapolis stations. Careful attention to this detail will increase transit ridership and will promote TOD.

Page 3-139 Section 3.4.1.1, Long Term indirect Land Use Impacts. The SDEIS makes the following statement regarding redevelopment potential and land use changes: "While some redevelopment within the West Lake 21st Street, and Penn Station areas would be possible, land uses surrounding the stations would be expected to generally remain unchanged because of the relatively high level of existing development in those areas." The West Lake Street station is adjacent to nearly 14 acres of single story shopping center development. The City has adopted policy direction (Midtown Greenway Land Use and Development Plan -2007) that calls for mixed use transit oriented development of five or more stories. Additionally, at the Penn Station along Madeira Avenue and Wayzata Boulevard there is approximately 3.5 acres of low scale commercial and industrial development. The Bryn Mawr Land Use Plan, adopted by the City in 2005, calls for mixed use development. For both the West Lake and Penn stations, these are significant areas of potential changes and intensification of the uses which the SDEIS does not recognize.

Page 3-168 – 3.4.2.1 It is stated, "Construction activities and potential light rail-related improvements both have the potential to affect groundwater by potentially changing the flow of or contaminating groundwater within the project vicinity." Please REPHRASE to add the potential of changing the flow of previously contaminated groundwater, such as, "... by

potentially changing the flow of groundwater (including previously contaminated groundwater if present), or contaminating groundwater, within . . .”

Page 3.169 – 3.4.2.1 - It is stated that groundwater removal would be required during construction of the light rail. Please identify if groundwater removal is expected to be required after completion of the tunnel in order to keep it functional. Other sections of the document appear to indicate this.

Page 3.169 – It is highly recommended that more accurate methods be utilized to determine the high groundwater elevation in the location of the tunnel. Typical soil borings may not be very reliable in this regard. If any post-construction groundwater discharges are proposed to the City of Minneapolis sewer systems, the City of Minneapolis will require the discharges be quantified based on the anticipated high groundwater elevation on the site.

Page 3.170 – Discharge of groundwater from the internal tunnel to the City of Minneapolis sanitary sewer will require additional review. Any proposed groundwater discharges will need to be quantified and testing of the groundwater for the presence of contaminants will be required. It should not be assumed that discharge to the City of Minneapolis sanitary sewer system will be granted.

Page 3.170 – It is the expectation that any waterproofing that is necessary in order to limit groundwater infiltration into and, in turn, groundwater discharges from the tunnel be maintained for the life of the improvements. It is recommended that the maintenance of any waterproofing proposals be thoroughly evaluated and selected with this in mind.

Page 3-170 – Footnote 34 addresses discharge as a result of a larger than 100-year storm event from tunnel portals. The proposed location(s) and rate(s) would need to be reviewed and approved by the City of Minneapolis.

Page 3.172 – The filtration tanks, infiltration basins or other means identified in The Risk of Groundwater Contamination during Construction section would also need to be reviewed and approved by the City of Minneapolis. The discharge as a result of a larger storm event would also need to be approved by the City of Minneapolis.

Page 3.172, C. Mitigation Measures – The groundwater management plan must also be reviewed and approved by the City of Minneapolis.

Page 3.177, list of potential BMPs, bullet 7 – straw bales are not allowed as BMPs in Minneapolis.

Page 3.179, C. Mitigation Measures – add that Stormwater runoff (long-term) will need to be in compliance with MPCA NPDES General Construction Permit Section III.D., PERMANENT STORMWATER MANAGEMENT SYSTEM, and will need to be reviewed and approved by the City of Minneapolis under Minneapolis Code of Ordinances Chapter 54, Stormwater Management.

Page 3-184 – The SDEIS makes the following statement regarding short term noise and vibration “Construction noise impacts are expected to be localized, temporary, and transient. These impacts would increase with proximity to the physical improvements. Additional details regarding potential short-term noise impacts will be evaluated further and provided in the forthcoming Final EIS, based on the equipment, duration, and type of work effort. These details and the respective short-term impact determinations will be provided when additional design and construction information is available.” While it is recognized that substantially more design work is ahead, many areas of major infrastructure, such as a shallow tunnel, are known and should be listed in the SDEIS.

Page 3-186 – The SDEIS concludes that “the results of ground-borne noise impacts for residential land use are presented in Table 3.4-14. There would be no vibration or ground-borne noise sensitive institutional land uses in the St. Louis Park/Minneapolis segment.” This statement needs to be substantiated or clarified.

Page 3-200 - Among the potential strategies for improving traffic operations at intersections is the modification of light rail at-grade crossings from preemption to a priority strategy. It is the understanding of the City of Minneapolis that priority signalization (not preemption) will be the standard for all Minneapolis intersections.

#### Chapter 4 –Public and Agency Coordination

Page 4.21 – Table 4.5-2, Preliminary list of Required Permits/Approvals and Reviews (by Agency Jurisdiction)

Under City of Minneapolis, add Stormwater Management – Approval. (Per Minneapolis Code of Ordinances Title 3 Chapter 54 Stormwater Management)



Lakes and Parks Alliance of Minneapolis, Inc.  
c/o The Chazin Group  
Lake Point Corporate Centre  
3100 West Lake Street, Suite 230  
Minneapolis, MN 55416

July 20, 2015

Ms. Nani Jacobson, Project Manager  
Southwest Light Rail Transit Project Office  
6465 Wayzata Blvd., Suite 500  
St. Louis Park, MN 55426

Via email: swlrt@metrotransit.org

Dear Ms. Jacobson,

I am contacting you as a board member of the Lakes and Parks Alliance of Minneapolis, Inc. Our organization endorses and supports the comments submitted by Light Rail Transit Done Right (LRTDR).

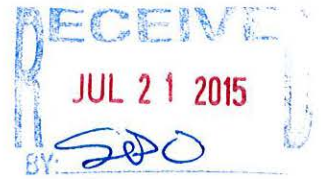
Please add this letter to the record of comments on the Southwest Light Rail Supplemental DEIS.

Sincerely,

George Puzak  
Lakes and Parks Alliance of Minneapolis, Inc., board member

Kenilworth Preservation Group (KPG)  
c/o The Chazin Group  
Lake Point Corporate Centre  
3100 West Lake Street, Suite 230  
Minneapolis, Minnesota 55416-5392

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Via email: swlrt@metrotransit.org

July 20, 2015

Ms. Nani Jacobson, Project Manager  
Southwest Light Rail Transit Project Office  
6465 Wayzata Blvd., Suite 500  
St. Louis Park, MN 55426

RE: Supplemental DEIS

Dear Ms. Jacobson,

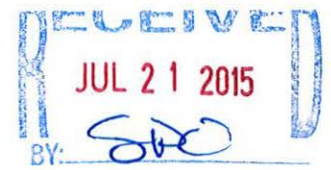
I am contacting you as chair of the Kenilworth Preservation Group (KPG). KPG endorses and supports the comments submitted by LRT Done Right.

Please add this letter to the record of comments on the Southwest Light Rail Supplemental DEIS.

Sincerely,

A handwritten signature in blue ink that reads "Stuart A Chazin".

Stuart A Chazin  
Chair - Kenilworth Preservation Group



# LRT-Done Right

2782 Dean Parkway  
Minneapolis, MN 55416

July 21, 2015

Nani Jacobson  
Assistant Director, Environmental and Agreements  
Metro Transit — Southwest LRT Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

Dear Ms. Jacobson:

LRT-Done Right is a grassroots organization of some 500 Minneapolis residents and taxpayers who have conducted exhaustive research and advocacy on the effects of light rail transit and freight lines on community well being. We hereby submit to you our comments on the Southwest LRT Supplemental Draft EIS. They are the product of literally thousands of volunteer hours of research, analysis, and writing. As citizens of Minneapolis and the Metro area, we hope and expect that they will receive appropriate respect, attention, and response.

The 2012 Draft Environmental Impact Statement clearly recommended that the best course of action was to relocate freight out of the Kenilworth Corridor.

This position was reversed in 2013, and the Metropolitan Council's recommendation is now to "co-locate" freight and light rail in the Kenilworth Corridor. We consider this a significant breach of public trust and the low point of a deeply flawed planning process. We are an organization that seeks to represent concerns of those most impacted by this unfortunate decision.

The current Supplementary Draft Environmental Impact Statement is partly intended to assess the impact of co-location in the Kenilworth Corridor. It fails to do so on many levels, summarized in the following points:

First, it considers the *temporary* freight rail part of the existing condition. Freight rail service that runs through the corridor would be both upgraded and made permanent; this is a *new* project that needs a full analysis. Because new *permanent* freight infrastructure is being added to the corridor, all visual, noise, vibration, safety and other environmental impacts should be measured *from a basis of no freight and no light rail*.

Second, this SDEIS is silent on the safety implications of locating freight trains carrying hazardous materials through an urban environment within feet of homes, parks, trails, passenger trains, and live overhead electrical wires. The new and serious impacts created by this situation would continue to grow as transport of ethanol and other volatile materials expands and freight trains grow longer.

Third, this SDEIS is significantly flawed in its findings regarding environmental impact, safety concerns, and disturbance of livability, if not outright danger, to those living within a half mile of the route, which we will refer to as the "Blast Zone." This is a real issue that was not as prevalent in the news when the alignment was first proposed. In the context of current discussions regarding the increased number of freight accidents across the United States and Minnesota, we are seriously concerned about the safety of families and loved ones who would live in a Blast Zone zone surrounding ethanol trains and sparking LRT wires.

Fourth, we are disturbed by the promises of unspecified remediation activities found throughout the SDEIS. As the Department of the Interior says in its *Handbook on Departmental Review of Section 4(f) Evaluations*: "Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable.... Reviewers should make sure that all possible site-specific planning has been done to identify and list the measures which will be undertaken, at project expense, to minimize harm to Section 4(f) properties." Such general promises are not acceptable to the federal government. Nor are they acceptable to us.

Finally, the SDEIS fails to address the significant costs associated with the many design and construction, safety, and environmental remedies that it will, based on our assessment, be required to implement — the relocation of a sewer force main that the Met Council installed only months ago, and sound and vibration remediation measures for area residents are but two. Nor does it recognize long-term costs of lost property tax revenue that would erode the tax base of the City of Minneapolis in perpetuity. We estimate that these combined costs would initially total at least \$13 million to \$24 million, and much more over the years.

When Hennepin County and the Met Council chose the present route for SWLRT between the Chain of Lakes through the Kenilworth Corridor — including "co-location," thus making the temporary freight rail permanent — they accepted the responsibility to respect the natural and built environments that it travels through as well as the people who bicycle, walk, recreate, and live there. LRTDR does not see evidence that this responsibility has been taken as seriously as necessary and the following pages, which respond to specific elements of the SDEIS, articulate some of the reasons why.

Mary Pattock  
On behalf of LRT-Done Right



## **LRT-Done Right response to Southwest Light Rail Supplemental DEIS**

### **3.4.1.2 Acquisitions and Displacements**

#### **B. Potential Acquisitions and Displacements Impacts**

Comment: We request more information about 3400 Cedar Lake Parkway, a strip of land valued by the City of Minneapolis \$2.1 million.<sup>1</sup> For years, the Hennepin County property tax website listed this parkland as owned by the Minneapolis Park and Recreation Board. Meanwhile, in discussions concerning SWLRT, the Met Council disputed this information, maintaining that the property belongs to BNSF. Recently, however, Hennepin County changed its website to say the property belongs to BNSF.<sup>2</sup> What is the basis of the change? What evidence does the Council have that the land is owned by BNSF railroad? Where are the supporting documents, or what was the process by which this change was made? Did the property change hands via a gift of public property? If so, when and why did that happen? If the property is indeed owned by the Park Board, then a compliance analysis will need to be conducted to comply with both Section 106 and 4(f).

In Short-Term Acquisition and Displacement Impacts, the Council states that “[s]hort-term occupancies of parcels for construction would...change existing land uses” including “potential increases in noise levels, dust traffic congestion, visual changes, and increased difficulty accessing residential, commercial and other uses.” The Council should say what the plans are to mitigate these effects for residents and businesses. Most important, how will prompt emergency fire, medical and police access be maintained?

In Short-Term Acquisition and Displacement Impacts, the Council discusses plans for remnant parcels without acknowledging its commitment with the City of Minneapolis in the Memorandum of Understanding. The MOU documents the Council’s agreement to convey property they own or acquire from BNSF or HCRRA in the Kenilworth Corridor that is not needed for the Project or freight rail to the Minneapolis Park and Recreation Board for use as parkland. Please see:  
<http://metro council.org/METC/files/f7/f7d41cfb-a062-46c7-942d-0785989da8a0.pdf>

Based on figures listed on the Hennepin County property tax website, annual property taxes payable just for the St. Louis Park properties listed as potential FULL parcel acquisitions in Table 3.4-3 total approximately \$240,000. Yet Section 3.4.3, Economic Effects, states that the annual reduction in property tax revenue to the City of St. Louis Park for all full AND partial acquisitions is only \$35,940. The SDEIS lists plans for partial acquisition of properties owned by Calhoun Towers, Calhoun Isles Condo Association, Cedar Lake Shores Townhomes, and other private property in Minneapolis, but identifies no property tax loss for Minneapolis. The Council should explain the calculations it used to conclude that the property tax losses are so low or even nonexistent. Although we understand that the Council may not wish to release dollar figures for specific property acquisitions at this time, the public must nevertheless be assured that the Council is not both minimizing the costs of acquiring these properties and ignoring the fact that taxpayers will need to compensate for a shrunken property-tax base, which we estimate would exceed \$4 million annually (based on an estimated 5 percent decline in property value for private homes and commercial buildings most impacted by SWLRT).

### **3.4.1.3 Cultural Resources**

#### **B. Potential Cultural Resources Impacts**

**This section identifies the potential long-term and short-term impacts to the archaeological and architecture/history resources listed in or eligible for the NRHP.**

#### **Long-Term Direct and Indirect Cultural Resources Impacts.**

Comment: Minneapolis residents have continually expressed concern with the impact the project will have, both during construction and after operation of SWLRT, on cultural resources in the City.

As stated by the Minnesota State Historic Preservation Office (MnSHPO), an adverse effect on one contributing feature is an adverse effect on an entire historic district. Therefore, the conclusion that the project will have an adverse effect on the Lagoon means that there will be an adverse effect on the Grand Rounds Historic District as a whole, as indicated in the SDEIS.

<sup>1</sup> See <http://apps.ci.minneapolis.mn.us/PIApp/ValuationRpt.aspx?pid=3202924120001> and <http://apps.ci.minneapolis.mn.us/PIApp/GeneralInfoRpt.aspx?pid=3202924120001>

<sup>2</sup> See <https://gis.hennepin.us/property/map/default.aspx>



Section 3.1.2.3 of the SDEIS lists possible mitigation measures that *may* be included in the Section 106 agreement:

- Consultation with MNSHPO and other consulting parties during the development of project design and engineering activities for locations within and/or near historic properties
- Integration of information about historic properties into station area planning efforts
- Recovering data from eligible archaeological properties before construction
- Consultation with MNSHPO and other consulting parties during construction to minimize impacts on historic properties
- Preparation of NRHP nominations to facilitate preservation of historic properties
- Public education about historic properties in the project area

*None of these measures can avoid, minimize or mitigate the long-term adverse effects of the project on the Grand Rounds Historic District in a meaningful way.* The noise impacts, including bells and horns, will be audible from distances within and beyond the Area of Potential Effect, and include not only the Lagoon area but also Lake of the Isles and Cedar Lake as well as the other parts of the Grand Rounds Historic District. *Noise and vibration impact studies should be done from a baseline assuming no freight, as HCRRA had committed to do and as was contemplated in the DEIS.* Despite the requirement that such impacts be minimized, co-locating both freight and light rail in the Kenilworth Corridor results in the opposite outcome.

The proposed bridges over the Lagoon would have an adverse impact because of their size and scale, inconsistency with the historic cultural landscape of the channel, the noise and vibrations caused by the light rail vehicles traveling the bridge and the fact that it may not be possible to mitigate the impacts of the new bridges, as stated by the MPRB earlier in the 106 process. The appearance of the new bridge structures and the sounds associated with modern rail infrastructure would alter the characteristics of “community planning and development,” “entertainment and recreation,” and “landscape architecture” that make the Lagoon eligible for NRHP designation, and will adversely affect the character and feeling of the Lagoon and how people use the historic resource, including the experience of using the waterway under the new structures. Given that the Council is proceeding with this project in spite of this adverse effect, we hope that designers will continue to be vigilant about minimizing the impact on the setting and feeling of the historic channel, including audible and visual intrusions that will alter the park-like setting of the Lagoon, a vital element of its historic character. These concerns extend to Cedar Lake and the beaches on it nearest to SWLRT, as well as the visual impact on Park Board Bridge #4, Lake of the Isles, Lake of the Isles Parkway and Lake of the Isles Historic District.

Table 3.4-5 lists cultural resources that have been preliminarily considered to have no adverse effect from the Project, because of continued consultation with MnSHPO and certain unidentified avoidance/minimization/mitigation measures. Throughout this table, “consultation” is offered as mitigation. But “consultation” is not the same as “mitigation.” Consulting means talking; mitigation means doing something. The SDEIS does not identify what it could do that would mitigate negative impacts. In any event, the possible mitigation measures listed above would also not significantly address impacts on the cultural resources listed in this table. *The Council must be responsible for ensuring that “continued consultation” is meaningful by conducting assessments and proposing specific mitigation solutions before the 106 agreement is written and finalized, as it is impossible to avoid adverse effects after SWLRT construction and operations commence.* See also our comments below on 3.5 Draft 4(f) Section Evaluation Update.

Cultural resources covered in table 3.4-5 include Lake of the Isles Residential Historic District, Kenwood Parkway Residential Historic District, Lake Calhoun, Cedar Lake Parkway, Cedar Lake, Park Bridge #4, Lake of the Isles Parkway, Lake of the Isles, Kenwood Parkway, Kenwood Park, Kenwood Water Tower and four NRHP listed or eligible homes in the Area of Potential Effect. Station activity will change traffic and parking patterns in the neighborhood and introduce long-term visual and audible intrusions that adversely impact these historic resources. Concerns about the long term Project impact on some or all of these cultural resources include the following:

- Long-term visual and audible intrusion from changes in traffic patterns related to station access: We are concerned that auditory impacts and changes in traffic and parking patterns will adversely affect the integrity of setting and feeling that make Kenwood Park, Kenwood Parkway, Lake of the Isles Parkway, Cedar Lake Parkway and the related residential historic districts, and the four individual homes listed on or eligible for the NRHP. A traffic analysis must be conducted and a plan to mitigate adverse impacts proposed and discussed before the 106 agreement is drafted.
- Noise effects from LRT operations: Audible intrusion from train operations, including bells and horns and the impact of trains going in and out of the tunnel, will alter the environment of the historic resources and the characteristics that make certain of these resources eligible for the NRHP. It seems unlikely that a few homes in the Kenwood Parkway Residential Historic District are the only cultural resources that will be adversely affected by noise from train operations.
- Infrastructure surrounding the tunnel and the massive tunnel portals could adversely affect the historic integrity of the resources. Signage along the historic parkways could also have an adverse effect. Specific design elements should be proposed to minimize these impacts and should be reviewed as part of the 106 process.

The degree of concern regarding the short-term impact of SWLRT construction on all of these cultural resources cannot be overstated. Noise and vibration sensitive resources need to be identified. The public needs to see a comprehensive noise and vibration study and analysis for the Project during construction including the impact of increased truck and construction equipment traffic. We would like details on what will be included in the "project wide construction plan." It should identify measures to be taken during construction to protect all historic properties from project-related activity including construction related traffic. We need real plans to prevent or repair damage resulting project activities, incorporating guidance offered by the National Park Service in Preservation Tech Note #3: Protecting a Historic Structure during Adjacent Construction, as well as an agreement that specifies how these potential impacts will be monitored and mitigated. The Council previously communicated to a neighborhood group whose residents experienced damage from a Council project that "[c]ontinuing with future projects, our goal is to ensure that claims are promptly and appropriately investigated to determine whether or not they may be related to the project. Depending on the facts of the claim, this may involve independent experts." We request that the Council communicate with owners of historic homes in the APE prior to construction to establish baselines and mitigation commitments.

Table 3.4-5 is confusing in that it lists station area development as a possible effect on the Kenwood Parkway Residential Historical District that will require continued consultation. The Met Council needs to explain what development it is referring to, because none is anticipated in this district. For example, the Southwest Community Works website and documents state: "Future development is not envisioned around this station...."

<http://www.swlrtccommunityworks.org/explore-corridor/stations/21st-street-station>

See also

<http://www.swlrtccommunityworks.org/~media/SW%20Corridor/Document%20Archive/investment-framework/ch-4-penn.pdf>

#### **3.4.1.4 Source: MnDOT CRU, 2014. Parklands, Recreation Areas, and Open Spaces**

##### **Long-Term Direct and Indirect Parklands, Recreation Areas, and Open Spaces Impacts**

Comment: As noted in our comments on 3.4.1.2 above, we request more information about 3400 Cedar Lake Parkway. This parkland has long been listed on the Hennepin County property tax website as belonging to the Minneapolis Park and Recreation Board. What evidence has the Council or Hennepin County discovered to recently change the website to indicate that this \$2.1 million property is owned by BNSF railroad? Does the conclusion of "no long-term direct impact" of the Project on Cedar Lake Park depend on the Met Council taking advantage of a loophole: that documentation conveying this Cedar Lake Park property to the Park Board many years ago may be lacking, even though the intent that it be parkland was understood? Is the conclusion a way to avoid conducting a compliance analysis as would be required under Section 106 and 4(f) if the property belonged to the Park Board?

The SDEIS states: "None of the indirect impacts on parklands, recreation areas, and open spaces from the LPA in the St. Louis Park/Minneapolis Segment would substantially impair the recreational activities, features, or attributes of those parklands, recreation areas, and open spaces." We dispute this conclusion. The permanent installation of freight rail and light rail in the Kenilworth Corridor that is too narrow to permit separation in accordance with AREMA and FTA guidelines creates a safety risk that would directly impair park activities in the event of a derailment and/or explosion of flammable materials.

For comment on the indirect impacts of the LPA in the form of visual, noise, and/or access impacts, please see comments to sections 3.4.1.5, 3.4.2.3, and 3.4.4.4 of this Supplemental Draft EIS.

##### **Short-Term Parklands, Recreation Areas, and Open Spaces Impacts**

Comment: Please specify the extent to which the stated "standard" measures would be sufficient to protect this environmentally sensitive parkland.

During construction, how can the safety of park and trail users (Park Siding Park, Cedar Lake Park, Lake of the Isles Park, and nearby trails and lakes) be assured, given that unit freight trains of 100 or more cars containing Class III flammable liquids, especially ethanol, travel through this narrow corridor in close proximity to a construction pit and materials, without whatever protective walls will later be installed?

#### **Section 3.4.1.5 Visual Quality and Aesthetics**

**Excerpt from City of Minneapolis RESOLUTION 2010R-008 by Colvin Roy:**

**Be It Further Resolved that the current environmental quality, natural conditions, wildlife, urban forest, and the walking and biking paths be preserved and protected during construction and operation of the proposed Southwest LRT line.**

**Be It Further Resolved that any negative impacts to the parks and park-like surrounding areas resulting from the Southwest LRT line are minimized and that access to Cedar Lake Park, Cedar Lake Regional Trail, Kenilworth Trail and the Midtown Greenway is retained.**

While we appreciate and agree that the visual impact from Viewpoints 2, 3, and 4 are recognized as being substantial, we strongly disagree and contest the idea that the level of visual impact north of the Kenilworth Channel crossing (including Viewpoints 5 and 6) will be “not substantial” (pages 3-167, 168). The negative visual impact of SWLRT in the Kenilworth Corridor, especially with freight rail remaining (contrary to all previous planning), will be *substantial throughout the corridor*.

The SWLRT plan proposes clear-cutting in the Kenilworth Corridor, a rare urban natural resource. It would remove a large amount of green space and thousands of trees, replacing them with an overhead catenary system, tracks and ballast. The park-like environment will be permanently degraded by this infrastructure, as well as by the approximately 220 daily trains traveling over the historic Kenilworth Lagoon and through the corridor.

Clearly, the visual impact of deforestation of this area will be great, especially given that the Kenilworth Trail is used by well over 600,000 annually. Over the past 7 to 10 years, neighbors and trail users have clearly expressed to Hennepin County and the Met Council the very high value they place on the green space, wildlife and bird habitat, trees and other vegetation in the Kenilworth Corridor.

The visual impact to the park-like environment is exacerbated by the continuing presence of freight rail, which was expected to be removed from the Kenilworth corridor at the time of the Alternatives Analysis, the Locally Preferred Alternative decision, and the 2012 DEIS.

The SDEIS says the consultant determining the *visual qualities* of the corridor relied on Google Earth, files of the revised project layout, and selected “photographically documented” views (Appendix J, section 2B). It does not say the consultant actually set foot in the area, or consulted any stakeholders. Assuming that is the case, we are most discouraged at the slipshod research methods used in this important document, and find it even less credible.

**At Viewpoint 5**, we support all efforts to create an “attractive design” for the bridges crossing the Kenilworth Channel. The three new bridges will certainly become a “focal point,” adding large cement structures and heavily impacting the setting and feeling of this element of the Historic Chain of Lakes and the Kenilworth Trail. An attractive design for these bridges does not compensate for the vegetative clearing. The character of the City of Lakes’ signature canoe, kayak and skiing route from Lake of the Isles through the Kenilworth Channel to Cedar Lake will be fundamentally and permanently degraded. There will be a substantial negative visual impact from the level of the water as well as the level of the trail.

**At Viewpoint 6**, the SWLRT project plans to remove a significant amount of vegetation along the edge of Cedar Lake Park, as well as trees, plants, and restored prairie currently along the bicycle and pedestrian trails. The claim that removing trees and replacing them with overhead power lines would create a positive visual experience for trail users (“open up the view, making it more expansive”) is absurd on its face and contradicts the clearly expressed will of the Minneapolis City Council and the adjacent neighborhood. The 21<sup>st</sup> Street Station, a slab of concrete and metal with fencing and catenaries, will indeed “create a focal point” — that is to say, a negative one. It is not credible, and it is even laughable, to assert that a concrete slab will positively impact the visual qualities of a spot immediately adjacent to an urban forest and is itself in a “park-like environment.”

*The negative visual impact of SWLRT in the Kenilworth Corridor, especially with freight rail remaining (contrary to all previous planning), will be substantial throughout the corridor. We find it absurd and disingenuous for the Council to claim otherwise. The Council must stop pretending that this problem does not exist, and get serious about identifying robust and meaningful mitigation measures for incorporation into the project.*

### **3.4.2.1, 3.4.2.2 Geology and Groundwater, Water Resources**

Comment: LRT Done Right demands that there be a much more significant and transparent discussion regarding the compensatory mitigation for damage to wetlands and aquatic resources in the Minneapolis segment, especially the Kenilworth Channel and Cedar Lake. While a permit application is required, the SDEIS identifies that there will be damage done to aquatic resources but does not specify the level of damage done during construction and then during operation of the line. The further impairment of these resources is a direct violation of the EPA Clean Water Act and will degrade one of the crown jewels of the Minneapolis "City of Lakes" water resources. Residents swim, paddle, and recreate in those resources, and to callously suggest that a section 404 permit will just address those concerns is alarming.

Further, LRTDR is not convinced that sufficient analysis has been done on existing contamination in the Kenilworth Corridor. Southwest Project Office has already stated that additional contamination is likely to be found, and while the additional contamination is stated to be covered by the contingency fund, LRTDR finds this approach to be irresponsible budgeting without fully knowing what contamination exists and if enough is actually budgeted in the fund. The Kenilworth Corridor north of 21<sup>st</sup> St is a former rail yard that housed up to 58 rail lines during its peak, and was in service for decades. The SDEIS itself specifies the numerous toxic contaminations in such soil due to its former use. LRTDR strongly opposes disturbing the land and releasing contamination into the water and air.

### **Southwest LRT Supplemental Draft EIS - Supporting Documents and Technical Reports: SWLRT Kenilworth Shallow LRT Tunnel Basis of Design Technical Report (Met Council, 2014d):**

#### **An Existing Sewer Force Main Crosses the Proposed Location of the SWLRT South Tunnel in the Kenilworth Corridor.**

The removal and relocation of recently installed dual force mains, running beneath the freight tracks and Kenilworth Trail (between Depot Street and W. 28<sup>th</sup> Street) at the site of the proposed south tunnel, will be necessary to accommodate co-location of LRT with freight in the Kenilworth Corridor. The presence of the existing dual sewer force mains has design, construction, and cost implications on the shallow tunnel, which are not addressed in the SDEIS. The SDEIS technical drawings for the shallow tunnel do not indicate the existing force sewer main or the sewer relocation plan. Although Metropolitan Council is clearly aware of this complication, since it refers to replacing 200 feet of the dual 18-inch sanitary sewer force mains at Depot Street in its 9/19/14 CTIB capital grant application, it nevertheless does not address its design impacts and costs in the SDEIS in the Kenilworth Shallow Tunnel Design Technical Report.

In 2013 the Metropolitan Council Environmental Services (MCES) installed replacement sewer force mains between France Avenue and Dean Parkway. The force mains follow Sunset Boulevard to Depot Street and then crosses under active freight railroad tracks and the Kenilworth Trail to West 28th Street. The force mains installation at this location was completed by tunneling under, and placed perpendicular to, the railroad tracks and Kenilworth Trail so as not to disrupt active rail operations. The tunneling process required construction of two tunneling (jacking) pits on either side of the tracks. One pit was located at Depot Street and the other was located at the end of West 28th Street adjacent to Park Siding Park. The tunneling pit near Park Siding Park measured 16 by 34 feet and was approximately 27 feet deep. The excavation of these pits required the use of a crane and an excavator.

The SWLRT south tunnel construction plan says a pit would be dug to a depth of approximately 35 feet in this same location. The existing force main crossing consists of a 60-inch diameter tunneled steel "casing" pipe. The distance to the top of the casing pipe is approximately 17 feet and the distance to the bottom is 22 feet. The dual 18-inch force main pipes pass through this tunneled casing. The current placement of the force main interferes with the proposed location of the tunnel construction pit. The force main will need to be removed and relocated either above the proposed tunnel or below the tunnel to a depth greater than approximately 45 feet below ground level. See diagrams A through C below. If the force main is relocated above the shallow tunnel, the tunnel will need to be dug deeper in order to accommodate the force main above. This will result in an increased steepness in the incline of descent and ascent of the entrance and exit to the tunnel respectively. If LRT trains cannot navigate said increased grade change then it may require building a longer tunnel in order to safely allow trains to exit and enter at a lesser incline/decline, adding to the cost and impact.

Risks associated with possible stray electrical current traveling in the ground from the LRT power lines to the sewer force mains have not been identified or addressed in the SDEIS.

The removal and re-installation of the dual force mains will have Economic, Social, and Environmental impacts:

**Economic costs:**

Long term increase in cost of the SWLRT project of an undetermined amount as a result of co-locating freight and LRT, including:

1. Cost of removing and relocating the sewer force main located under the freight tracks and the Kenilworth Trail.
2. Cost of possible redesign of the south tunnel to accommodate force main relocation if it is reinstalled above the south tunnel.
3. Costs associated with re-engineering or lift station(s) that may be required to ensure adequate force is maintained in the sewer main if the main is re-located to a deeper position (i.e., from approximately 22 feet to more than 45 feet below ground level).
4. Cost of remediation of any portions of Park Siding Park that may be affected during removal/relocation of the force sewer main.
5. Cost of roadwork at Depot Street to remove/relocate force main.
6. Cost of damages to walls, ceilings and foundations of neighboring residences as a result of construction to remove/relocate the force sewer main.
7. Costs to remediate noise and vibrations impacts on the community that may be experienced during the construction period and post construction period should lift station(s) be required.

**Social:**

**Parkland, Recreation, Open Spaces and Safety Impact:**

Short-term construction impact - Portions of Park Siding Park (a Section 4 (f) property) may again be affected in order to accommodate the removal and reinstallation of this force sewer main and construction of tunneling (jacking) pits. The original construction resulted in closure of the park to users for an extended period, installation of a temporary detour through the park to accommodate the closure of Dean Court, destruction of park vegetation, gardens and lighting, and the removal of playground equipment. Some of these same impacts may again occur during the removal/relocation of the force main and construction of associated jacking pits. In addition, the construction of the south tunnel is expected to take 2-3 years and requires a deep open pit adjacent to Park Siding Park. The access and enjoyment of this park will be affected by the tunnel construction during this extended time frame and presents a dangerous environment for nearby park users and freight rail operations. The mitigation and cost of remediation of the parkland have not been addressed in the SDEIS.

**Environmental:**

**Noise:**

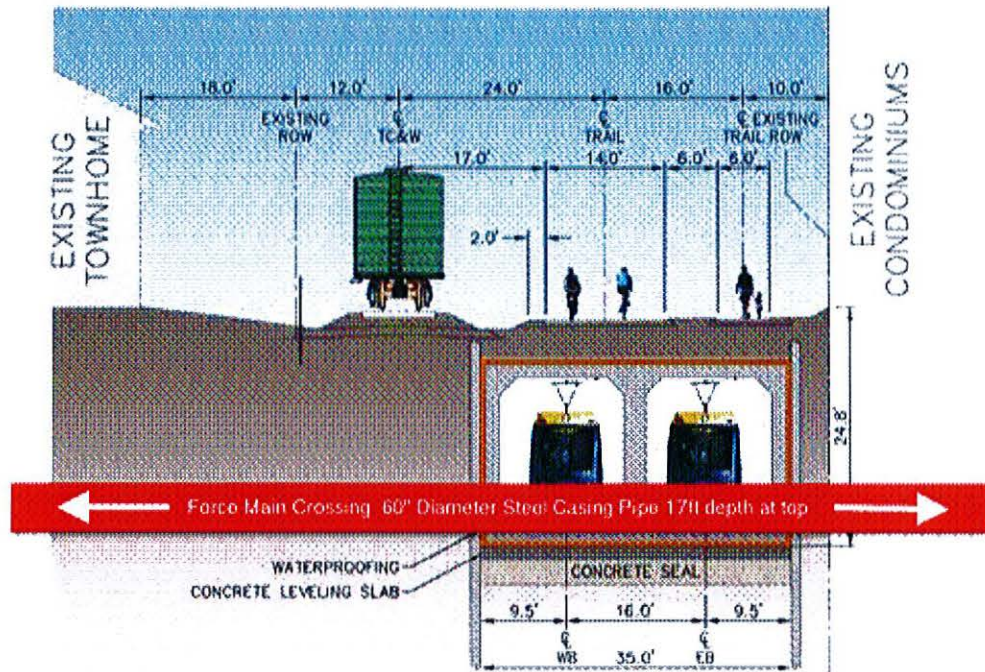
Short-term noise impacts - Removal and reinstallation of the force line will result in noise impacts of an undetermined level to both neighboring residents and Park Siding Park users as a result of both construction activities and construction vehicles. Mitigation plans/cost are not included in the SDEIS and need to be addressed.

**Vibration:**

Short-term vibration impacts – Effects of construction activities and, to a lesser extent, construction vehicles will have an impact on park users, neighbors and their residences. Vibration and associated ground-borne noise impacts may damage walls, ceilings and foundations of nearby residences, as was experienced in the original construction of this force line. Mitigation plans/cost are not included in the SDEIS and need to be addressed.



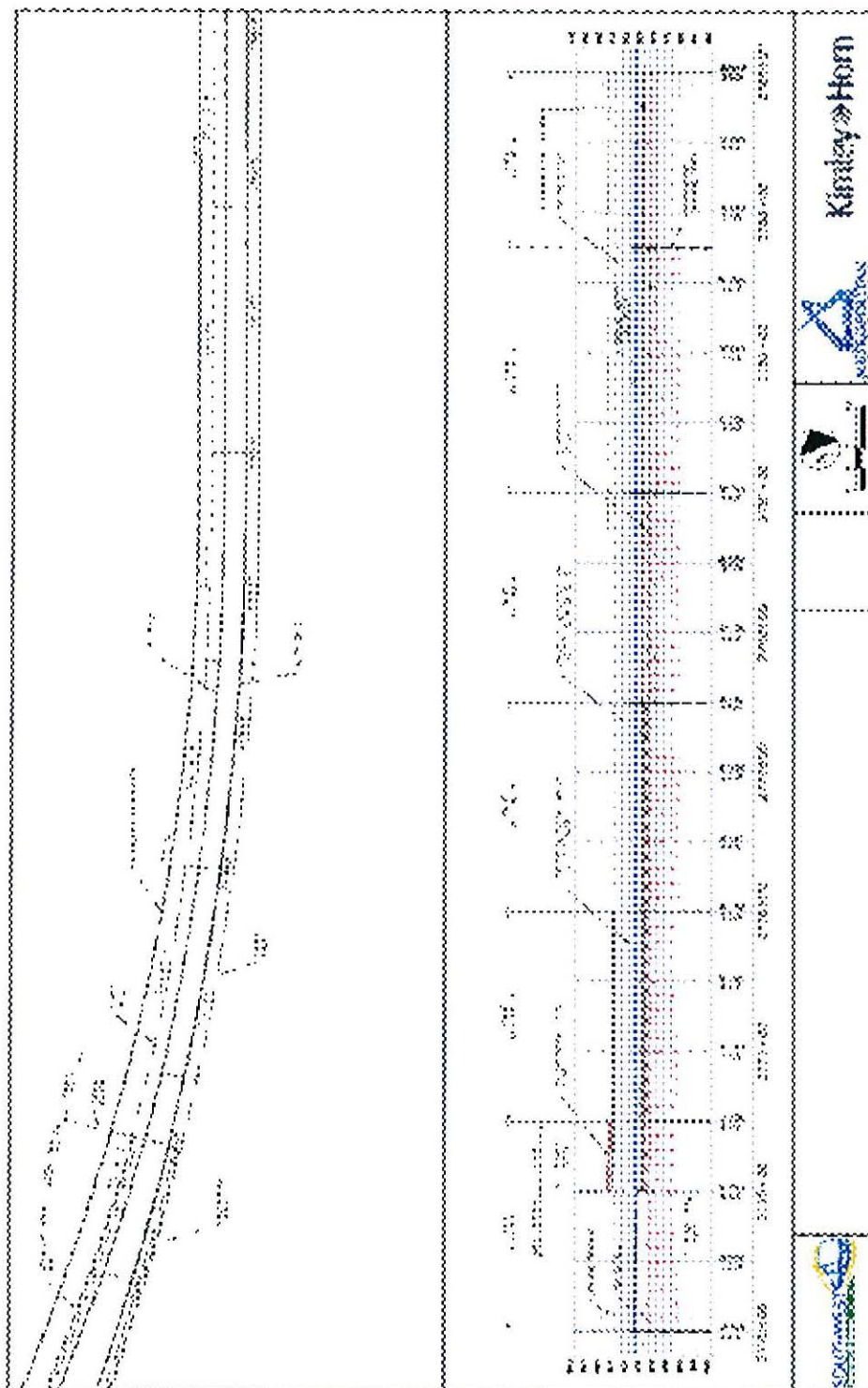
**Diagram A** – Existing sewer force main at approximately 22 feet below grade obstructs planned location of SWLRT south tunnel in the Kenilworth Corridor, which requires an estimated 45 feet below ground level for construction pit and helical piles.







**Diagram C - SWLRT South Tunnel Typical Cell Sequencing per SDEIS Note:** the helical piles are shown at approximately 820 feet above sea level which is approximately 45 feet below the ground level.





### 3.4.2.3 AND 3.4.2.3 NOISE AND VIBRATION

Comment: The SDEIS greatly understates both noise and vibration impacts of SWLRT.

- It uses wrong data as the fundamental framework for noise and vibration analyses. The sole purpose of this SDEIS is to assess the impact of changes made in the SWLRT plan since the 2012 DEIS; the baseline data used in this study should therefore have reflected that 2012 plan — which *did not include a freight train*. However, the SDEIS bases its noise and vibration data on a scenario that *does* include a freight train, thereby misleadingly minimizing the degree to which noise and vibration would be increased above what was indicated in the 2012 DEIS. Use of the wrong baseline data means that in this section the document fails to meet its goal of evaluating “the result of adjustments to the design of the Southwest LRT Project since the publication of the [Draft EIS](#) in 2012.”<sup>3</sup> *This defect renders the noise and vibration sections of the SDEIS fundamentally flawed and misleading. They need to be reworked with appropriate and correct data.*
- The SDEIS estimates noise and vibration impacts from points that would not be the most severely impacted. The SDEIS does not measure impacts on residences closer than 45 feet from the SWLRT tracks, whereas the closest homes to the LRT tracks are only 31 feet away. The CIDNA-sponsored study by ESI Engineering raised this problem with respect to the 2012 DEIS, but it has not been reflected and incorporated into the SDEIS.
- The SDEIS effectively ignores the impacts of construction. See more below.

### Noise 3.4.2.3

Comment: When the Met Council chose the present route for SWLRT between the Chain of Lakes through the Kenilworth Corridor, and included “co-location” which will make the existing freight rail permanent, the project implicitly accepted the responsibility to respect the natural and built environments that it travels through as well as the people who bike, walk, recreate, and live there. We believe that this responsibility has not been taken seriously and the following describes why.

**SWLRT noise impacts substantially minimized:** We believe that the SDEIS substantially minimizes the noise impacts associated with the proposed SWLRT. The noise impact of SWLRT in this area of Minneapolis will be highly significant for a number of reasons, but most notably because of the tranquility, recreational, park, and residential use currently existing in and bordering the Corridor. Some have compared the proposed SWLRT route with the Blue Line (Hiawatha) and the Green Line (Central Corridor down University Avenue). But such comparison is inappropriate, since the Blue and Green lines run immediately adjacent to commercial thoroughfares or four-lane roads that carry cars and heavy trucks around the clock. By contrast, the Kenilworth area is a quiet environment, and is part of the **Grand Rounds National Scenic Byway**.<sup>4</sup> By contrast, the Kenilworth Corridor is a unique, quiet environment, part of the Grand Rounds National Scenic Byway.

The SDEIS coolly states that 24 residences would suffer Severe or Moderate noise impact. Translated, this means the noise of 220 light-rail trains running daily from 4 a.m. to 2 a.m. would fundamentally transform the adjacent neighborhood with near-constant noise and vibration at sound levels up to 106 dBA (the sound of warning bells — equal to the sound of a jet take-off 1,000 feet away). As noted in Appendix H (SDEIS Noise and Vibrations Memoranda), residences are considered Category 2 buildings, with the expectation that sleep occurs there.

The noise levels given in Noise Fact Sheet (Appendix H p. 19) state the following: LRT trains traveling at 45 mph generate maximum typical noise levels of 76 dBA at 50 feet (equivalent to freeway noise at 50 feet), 71 dBA at 100 feet, and 66 dBA at 200 feet. Adding 211-220 LRT three-car trains to the Kenilworth Corridor day and night, each producing such elevated noise levels, would be a severe and overwhelming intrusion, drastically increasing the noise generated. This would hold true even if the only noise increase were from the LRT trains traveling at their stated speed, per the SDEIS, of 45 mph.

<sup>3</sup> <http://metro council.org/swlrt/sdeis>

<sup>4</sup> A National Scenic Byway is a road recognized by the [United States Department of Transportation](#) for one or more of six “intrinsic qualities”: archeological, cultural, historic, natural, recreational, and scenic. Congress established the program in 1991 to preserve and protect the nation’s scenic but often less-traveled roads and promote [tourism](#) and economic development. The National Scenic Byways Program (NSBP) is administered by the [Federal Highway Administration](#) (FHWA).

Our conclusion that the LRT trains in the midst of a residential and recreational area would be an overwhelming intrusion is supported by the analysis below, which assesses the combined impacts of LRT frequency, time of day or night of LRT, and LRT bell noise intensity and frequency identified in Appendix H, SDEIS p.3-13 and p.3-18.

#### **LRTDR Analysis of SDEIS Appendix H Table 1 & p. H-4 Data**

- Bells are sounded for 5 seconds prior to grade crossings, as vehicles approach grade crossings, such as the 21st Street in the Kenilworth Corridor
- Grade crossing bells are used at grade crossings for 20 seconds for each train; 21<sup>st</sup> Street is also a grade crossing.
- Bells are sounded twice at stations -- once entering and once exiting station platforms, such as the 21<sup>st</sup> Station (SDEIS gives no duration. We request the duration of bells sounding when entering and exiting station platforms be made public. This information is needed for accurate noise impacts to be known.
- Total bell time (not counting the brief pause between entering and exiting the station) is known or given as more than 25 seconds per train. It is unknown how much longer than 25 seconds the bells will sound, as exit/enter bell duration is not given in the SDEIS.

#### **WEEKDAYS**

##### **Early morning 4:00 AM – 5:30 AM**

- 6 to 8 trains per hour equals 9 to 12 trains per day between 4:00 AM and 5:30 AM
- This means 1 SWLRT train at 66 to 76 dBA every 7.5 to 10 minutes
- Would produce 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes

##### **Early morning to evening 5:30 AM – 9:00 PM**

- 12 SWLRT trains per hour equals 186 trains per day between 5:30 AM and 9:00 PM
- This means 1 SWLRT train every 5 minutes
- Would produce 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 5 minutes.
- At least 10% of every 5 minute period in the Kenilworth Corridor will consist of 88dBA and 106 dBA bell noise
- *At least 6 minutes of every hour from early morning to 9 PM in the Kenilworth Corridor will consist of 88dBA and 106 dBA bell noise.*

##### **Evening to early morning 9 PM to 2 AM**

###### **9 PM to 11 PM**

- 6 to 8 trains per hour equals 12 to 16 trains per evening between 9 PM and 11 PM
- This means 1 SWLRT train every 7.5 to 10 minutes
- Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes

###### **11 PM – 12AM**

- 2 trains per hour equals 2 trains per night between 11 PM and 12 AM
- This means 1 SWLRT train every 30 minutes
- Would entail 25-plus seconds of bells ((5 seconds 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 30 minutes

##### **Very early morning 12 AM – 2 AM**

- 1 to 2 trains per hour equals 2 to 4 trains per day, between 12 AM and 2 AM

- This means 1 SWLRT train every 30 to 60 minutes
- Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 30 to 60 minutes

#### **Very early morning 2 AM – 4 AM**

- 2 hours of no LRT trains equals baseline — current noise levels

***Total equals 211-220 SWLRT three-car trains per weekday***

### **WEEKENDS**

#### **Early morning 4:30 AM to 9 AM**

- 6-8 trains per hour equals 26 to 36 trains per day between 4:30 AM and 9 AM
- This means 1 SWLRT train every 7.5 to 10 minutes
- Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes

#### **Morning to evening 9 AM – 7 PM**

- 12 trains per hour equals 120 trains per day between 9 AM and 7 PM
- This means 1 SWLRT train every 5 minutes
- Would entail at least 25 seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 5 minutes.
- At least 10% of every 5 minute period in the Kenilworth Corridor would consist of bell noise at 88dBA and 106 dBA
- At least 6 minutes of every hour from early morning to evening in the Kenilworth Corridor will consist of bell noise at 88dBA and 106 dBA

#### **Evening 7 PM to 9 PM**

- 8 trains per hour equals 16 trains per day between 7 PM and 9 PM
- This means 1 SWLRT train every 7.5 minutes
- Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 minutes

#### **Late evening 9 PM – 11 PM**

- 6 – 8 trains per hour equals 12 to 16 trains per day, 9 PM – 11 PM
- 1 SWLRT train every 7.5 – 10 minutes
- 25-plus seconds of bell noise (5 seconds 88 dBA, plus 20 seconds 106 dBA, unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes

#### **Late evening 11 PM – 12 AM**

- 4 trains per hour equals 4 trains per day between 11 PM and 12 AM
- This means 1 SWLRT train every 15 minutes
- 11 PM to 12 AM weekend train frequency is double the weekday frequency of 11 AM to 12 AM
- Would entail 25-plus seconds of bell noise (5 seconds 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 15 minutes

#### **Very early morning 12 AM to 2 AM**

- 2 to 4 trains per hour equals 4-8 trains per day between 12 AM and 2 AM
- This means 1 SWLRT train every 15 to 30 minutes
- 12 AM to 2 AM weekend train frequency is double the weekday frequency of 12 AM to 2 AM
- 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 15 to 30 minutes

#### **Very early morning 2 AM – 4 AM**

- No trains — equals current existing conditions

***Total equals 180 -195 SWLRT three-car trains every weekend day.***

The result of LRT noise would be that the corridor will be permanently changed from a quiet, tranquil area sought by pedestrians, cyclists, and outdoor enthusiasts, and a highly desirable residential area to an area severely disrupted by the noise of a highly mechanized transit route.

Beyond permanently degrading the area, there will be multiple public health consequences of SWLRT noise in the corridor. The impact of repetitive noise intrusion on neighborhood public health will be significant. For example, regarding the obvious potential for sleep interruption caused by SWLRT noise (and there will be more trains during the late evening and early morning weekend hours) a research review published in the December 2014 edition of *Sleep Science*, summarizes:

Emerging evidence that these short-term effects of environmental noise, particularly when the exposure is nocturnal, may be followed by long-term adverse cardio metabolic outcomes. Nocturnal environmental noise may be the most worrying form of noise pollution in terms of its health consequences because of its synergistic direct and indirect (through sleep disturbances acting as a mediator) influence on biological systems. Duration and quality of sleep should thus be regarded as risk factors or markers significantly influenced by the environment. One of the means that should be proposed is avoidance at all costs of sleep disruptions caused by environmental noise.”

The article continues:

The World Health Organization (WHO) has documented seven categories of adverse health and social effects of noise pollution, whether occupational, social or environmental. The latter [sleep disturbance] is considered the most deleterious non-auditory effect because of its impact on quality of life and daytime performance. Environmental noise, especially that caused by transportation means, is a growing problem in our modern cities. A number of cardiovascular risk factors and cardiovascular outcomes have been associated with disturbed sleep: coronary artery calcifications, atherogenic lipid profiles, atherosclerosis, obesity, type 2 diabetes, hypertension, cardiovascular events and increased mortality....during the past year, the relationship between insomnia and psychiatric disorders has come to be considered synergistic, including bi-directional causation.”<sup>5</sup>

There is growing evidence that the opportunity to benefit from greenspace — what some mental health experts have referred to as “soft fascination”<sup>6</sup>— supports social and psychological resources and recovery from stress. The perpetual and repetitive noise from SWLRT would interrupt the restful and restorative experience enjoyed by tens of thousands of people in the Kenilworth Corridor, at nearby beaches, parks, in the Kenilworth Channel and general environs of Lake of the Isles and Cedar Lake. Such opportunities to enjoy nature and relieve stress, though often taken for granted by suburban dwellers, are extremely limited in urban areas, yet equally critical for their mental health.

With healthcare costs and disease prevention being prominent national and local priorities, the economic value of the public health benefit of the Chain of Lakes and Kenilworth Corridor cannot be ignored. *We request a study of the physical and mental*

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<sup>5</sup> *Sleep Science*, Volume 7, Issue 4, December 2014, Pages 209-212

<sup>6</sup> *British Journal of Sports Medicine* 2012, “The Urban Brain: Analyzing Outdoor Physical Activity with Mobile EEG”

*health impacts of the noisy, hyper-mechanization of this currently placid area, which plays a key role in the life and character of our neighborhood and the entire City of Minneapolis.*

### **A. Existing Conditions (p. 3-180)**

**This section describes existing noise-sensitive land uses in the St. Louis Park/Minneapolis Segment and existing noise levels.**

#### **Fundamental defect with baseline noise measurements**

Comment: As noted above, the SDEIS uses wrong data as the fundamental framework for noise analyses. The sole purpose of this SDEIS is to assess the impact of changes made in the SWLRT plan since the 2012 DEIS; the baseline data used in this study should therefore have reflected that 2012 plan — which *did not include a freight train*. However, the SDEIS bases its noise data on a scenario that *does* include a freight train, thereby misleadingly minimizing the degree to which noise and vibration would be increased above what was indicated in the 2012 DEIS. Use of the wrong baseline data means that in this section the document fails to meet its goal of evaluating “the result of adjustments to the design of the Southwest LRT Project since the publication of the Draft EIS in 2012.”<sup>7</sup> *This defect renders the noise section of the SDEIS fundamentally flawed and misleading. It needs to be reworked with appropriate and correct data.*

The SDEIS estimates noise and vibration impacts from points that would not be the most severely impacted. The SDEIS does not measure impacts on residences closer than 45 feet from the SWLRT tracks, whereas the closest homes to the LRT tracks are only 31 feet away. The CIDNA-sponsored study by ESI Engineering raised this problem with respect to the 2012 DEIS, but it has not been reflected and incorporated into the SDEIS.

Further, since aircraft overflights are generally scarce, the average current noise level per hour is extremely low when averaged over a 24-hour period.

Additionally, there are significant seasonal and weather-related variations in noise levels, which cannot be captured when sound is measured during one 24-hour period in the summer.

Finally, in Appendix H, p.2, it is noted, “noise monitoring was performed at other locations not listed in the table. Those sites will either be addressed in the forthcoming Final EIS or no longer fall within the area where they would be potentially impacted by project noise due to design refinements during Project Development.” Since the purpose of the SDEIS is to inform the public and decision makers, and provide opportunity for comment on all areas of concern, in order to fulfill that NEPA mandate, all measurements that were made and publicly financed should be made public.

### **B. Potential Noise Impacts**

#### **Noise Impacts Measurement Tables (Table 3.4-11, 3.4-12)**

Comment: Following FTA noise assessment guidelines, the 76 dBA LRT noise occurring every 5 minutes is measured as having a lower impact than that actual dBA of 76 because the LRT noise is not continuous. Thus, though this quiet urban area will be exposed to an actual repetitive noise of 76-80 dBA day and night, the rating of the impact is lower and measured as only 51 – 64 dBA in Tables 3.4-11, 3.4-12. The significantly lower measurement lessens the determination of findings of impacts, and therefore, whether impacts are determined as non-existent, Moderate or Severe. *This engineering methodology covers up the actual impact on people of loud repetitive noise in a peaceful setting.*

The 25-plus seconds of repetitive bell noise described in the LRTDR Analysis of SDEIS Appendix H Table 1 & p. H-4 Data above does not appear to be included in the SDEIS noise analysis in Tables 3.4-11, 3.4-12, which would clearly increase the severity of noise impact at all locations. The SDEIS also neglects to report and measure the cumulative effect of LRT and freight train noise. This information would likely show that more than 24 residences would be affected; more of them would be impacted at the severe level, and a greater impact on the Kenilworth Channel and Kenilworth Lagoon Bank.

<sup>7</sup> <http://metro council.org/swlrt/sdeis>

Furthermore, future projected noise levels of LRT and freight will be higher than the projection inputs used by the SDEIS after the clear cutting of trees and vegetation in the corridor, increasing the impact of noise generated by both SWLRT and the freight rail. When utilizing the Source – Path – Receptor FTA noise impact assessment framework, it is clear that the inputs for each of the three parameters are critical and control the outcomes determining the severity of noise impact. Removal of the trees and vegetation eliminates a significant and well-established noise barrier currently in the path of noise from freight and future SWLRT. *The SDEIS does not address the impact of clear-cutting the trees and vegetation in the Kenilworth Corridor on Moderate versus Severe LRT noise impacts.*

### **Tunnel Swaps Noise for Vibration**

As stated in the SDEIS, the tunnel section of the SWLRT is supposed to eliminate “almost all noise impacts within that segment of the corridor.” It must be noted, however, that these noise impacts will be replaced by vibration impacts; see the Vibration Section below.

### **Analysis of Table 3.4-12**

**Inaccurate land use designation for the Kenilworth Channel:** We strongly challenge the land use designation of the Kenilworth Channel as Category 3. As defined in Appendix H, Category 3 is:

Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech and concentration on reading material...”

The SDEIS designates the banks of the Kenilworth Channel as falling within the most noise sensitive Category 1. However, as stated above, the Channel itself is not included in that most highly sensitive designation, but instead is classified as “institutional land use.” Category 1 is defined in Appendix H as:

Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheatres and concert pavilions, as well as National Historic Landmarks with significant outdoor use.

The SDEIS states the “grassy area on the banks of the Lagoon” falls within Category 1 due to the “passive and noise sensitive recreational activities that occur there (where quietude is an essential feature of the park).” The designation of Category 1 versus 3 for the Kenilworth Channel appears to hinge excessively on one word — the term “passive” — to describe the activities for which the Channel banks are used. However, quietude is equally and very clearly an essential feature of the Kenilworth Channel itself, whose peaceful though not “passive” activities include canoers and cross country skiers gliding serenely on the water or ice while those on the grassy banks look on. The quietude of the Kenilworth Channel is inseparable from the quietude of its grassy banks; therefore both should be Category 1.

*Significantly, the consequences of placing the Kenilworth Channel in Category 3 are 1) that the obligation to mitigate impacts is lowered, and 2) that the threshold to establish severe impact is higher and harder to reach. Had the Kenilworth Channel been accurately designated a Category 1, then the Channel would have been only 1 dBA below “Severe impact.”*

Even with the lowering of the land use category of the Kenilworth Channel to a Category 3, the SDEIS finds a moderate impact of the addition of LRT noise. The footnote to SDEIS Table 3.4-12, states that the noise impact increases as one approaches the LRT line and becomes severe when the channel falls within the HCRRA right of way.

*While the SDEIS states that the land use categories were made in consultation with the MPRB and MN SHPO, we strongly dispute their coherence and accuracy. If the intention of the SPO is to preserve the character and experience of the Channel, then it must designate it as a Category 1 and then make public the mitigation plans and costs well in advance of the final FEIS.*

**SWLRT Violates the System of Minneapolis Parks:** Horace Cleveland’s visionary master plan, *Suggestions for a System of Parks and Parkways for the City of Minneapolis*, proposed a park system of connecting sites of beauty and natural interest throughout the city, rather than a series of detached open areas or public squares. The vision of a park “system” has guided the Park Board ever since and is one of the primary reasons for the success and national prestige of the Minneapolis Parks. The SDEIS procedure of singling out specific pieces of park for analysis such as Lilac Park, the Kenilworth Channel and its grassy banks runs fundamentally contrary to the underlying vision of a coherent Minneapolis Park System.

*The presence of perpetual, repetitive LRT noise over the Kenilworth Lagoon and throughout the interconnecting parks and lakes woven throughout this area violates the larger system of the Minneapolis Parks.*

*Site N 17 (p. 3-182)*

**21<sup>st</sup> Street Station Noise Impacts:** At the proposed 21<sup>st</sup> Street Station, crossing and station bells generating a noise level of 106 dBA and LRT bells generating 88 dBA will seriously add to the overall noise levels for 22 hours a day; only between 2:00 a.m. and 4:00 a.m. will neighborhood residents in this area be able to sleep uninterrupted. The LRTDR Analysis of the SDEIS Appendix H Table 1 & p. H-4 given above shows the impact throughout the day and night.

Further, freight trains may need to use their horns to safely cross 21<sup>st</sup> Street, as is the current case with the “temporary” freight operations. We thus strongly disagree with the characterization of the noise impacts in the 21<sup>st</sup> Street station area as moderate and limited. “Sensitive receptors” in this area will be subject to train arrivals, departures, signal bells and perhaps horns, seriously eroding the quality of life in the neighborhood and reducing the enjoyment of the recreational trail and Cedar Lake Park for users of these regional amenities.

We believe that the residences with noise impacts deemed “moderate” in the SDEIS will likely experience severe noise impacts without proper mitigation, and that in addition to the residences identified, residences along 21<sup>st</sup> Street, 22<sup>nd</sup> Street, and Sheridan Avenues will also experience at least a moderate noise impacts. We further believe that there will be an impact on more residences than the 24 cited in the SDEIS.

Note: The SDEIS misidentifies some of the homes deemed to have a “moderate impact without mitigation” as being on Thomas Avenue South; some of the addresses are actually on Sheridan Avenue South.

**LRT Horns are Likely:** According to the federal Train Horn Rule<sup>8</sup>, locomotive engineers must sound horns at a minimum of 96 decibels for at least 15 seconds at public highway rail grade crossings. Appendix H indicates that LRT Horns are 99 decibels and are sounded for 20 seconds. The SDEIS states that LRT horns would only be sounded at crossings where speeds exceed 45 mph. Since LRT and freight trains may not reach that speed in the Kenilworth Corridor, presumably no horns would be sounded when LRT vehicles cross 21<sup>st</sup> Street. Given the volume of pedestrian, bicycle, and car traffic at this crossing, it is not safe to silence LRT horns at this crossing. The noise created by horns sounding for LRT trains at least 96 decibels for a minimum of 15 (or 99dBA for 20) seconds represents a “severe” noise impact and is therefore prohibitively detrimental to quality of life in a residential neighborhood.

### Issues Not Addressed in SDEIS Noise 3.4.2.3

**Not addressed: Impacts near Portals:** Two areas of potential noise impacts do not appear to be adequately addressed by the SDEIS. First, table 3.4-11 does not appear to cover noise that will be experienced by the homes directly behind the SWLRT tracks after it emerges from the tunnel and crosses the Kenilworth Channel. Since LRT on ballast and tie track produces noise at 81 dBA, we believe that those residences will experience noise at the same level as homes on Burnham Road and Thomas Avenue South. Further, Appendix H notes that noise will increase by 1 dBA for homes within 100 feet of the tunnel entrance/exits. We strongly request that noise impacts be determined for those residences and that they be included in consideration for noise mitigation. We further request that the cost of that additional mitigation be included in the costs of the Final DEIS.

**Not addressed: Tunnel Ventilation System:** Second, noise from the tunnel ventilation systems does not appear to have been considered. The SDEIS states that the tunnel section of the SWLRT is supposed to eliminate “almost all noise impacts within that segment of the corridor.” However, we understand that there will be ventilation fans connected to the tunnels as well as a ventilation “building” planned near Cedar Lake Parkway. The SDEIS neglects assessment of the noise impacts from such a ventilation system, and this information is critical to determining whether the proposed tunnel would have a positive or negative environmental impact.



Policy-makers and citizens need adequate information on the noise impacts of both the vents and the ventilation building before proceeding with tunnel construction. Appendix H indicates that the fans will operate only on an emergency basis, but we do not see any mention of the ventilation building in the SDEIS. We request clarity on the amount of time each day that they will be operational and creating noise impacts, and the dBA of each.

**Not addressed: Freight Operations:** The existing freight operations, intended to be temporary, are being made permanent. The noise generated by these trains, which often have three or four engines, must be measured and considered in the overall assessment of noise impacts of the SWLRT project.

The SDEIS simply states that the noise issues described above will be addressed in the Final EIS and that they will be mitigated. *We take the strong view that now is the critical and only time to prove that mitigating the noise issues we have described is possible and that the cost of such mitigation is in the budget.*

### 3.4.2.4 Vibration

#### LONG-TERM DIRECT AND INDIRECT VIBRATION IMPACTS

Comment: The SDEIS states, "There are no vibration impacts in this segment [of the SWLRT route]" This claim is not credible in view of advice provided in *Transit Noise and Vibration Impact Assessment*, the FTA's own guidance manual presenting procedures for predicting and assessing noise and vibration impacts of proposed mass transit projects:

Vibration from freight trains can be a consideration for FTA-assisted projects when a new transit line will share an existing freight train right-of-way. Relocating the freight tracks within the right-of-way to make room for the transit tracks must be considered a direct impact of the transit system, which must be evaluated as part of the proposed project. However, vibration mitigation is very difficult to implement on tracks where trains with heavy axle loads will be operating."<sup>9</sup>

The SDEIS says that 54 residences<sup>10</sup> in the "St. Louis Park/Minneapolis" segment (note that all of them are within Minneapolis) will be impacted by the ground-borne noise. This is an unacceptable level of impact on those 54 families.

According to Appendix H, which addresses both noise and vibration, the table titled Typical Maximum Noise Levels (dBA) on page H-19 quantifies the dBA for LRT, freight and then lawnmowers and buses idling. The dBA for freight rail in that same table is shown for a speed of 20 MPH. The freight in the Kenilworth Corridor travels at a maximum of 10 MPH. For comparison purposes, the assessment should use the dBA of freight trains traveling at 10 mph. Use of the sound impact from a train travelling twice as fast (20 mph) as the current speed in the corridor understates the current noise level (from freight), thereby minimizing the impact and differential from the LRT trains.

Regardless of whether the residences are impacted by vibration from the tunnels or from the noise which is flagged as a "Residential Annoyance" in the tables in Appendix H, the fact that these "annoyances" will occur incessantly — 220 times per day starting at 4 a.m. and continuing to 2 a.m. — means the impact on those residents will be significant and should be considered "severe". This is very unlike the impact of the freight trains: they may in some cases may be louder than the LRT, but there are only one or two of them per day — often not during the night hours — and then they are gone.

Regarding ground-borne vibration and noise, it should be noted that the impacts projected might underestimate real-world impacts, which could be more annoying than assumed. The FDA manual states: <sup>11</sup>

...the degree of [ground-borne vibration and noise] annoyance cannot always be explained by the magnitude of the vibration alone. In some cases the complaints are associated with measured vibration that is lower than the perception threshold.

<sup>9</sup> Chapter 7: Basic Ground-Borne Vibration Concepts, 7-9

<sup>10</sup> All of them are Category 2 receivers: "residences and buildings where people normally sleep."

<sup>11</sup> Chapter 7: Basic Ground-Borne Vibration Concepts, 7-6



## SHORT-TERM VIBRATION IMPACTS

The SDEIS all but ignores construction-related ground-borne noise (vibration) — except for a single, dismissive comment: “Short-term vibration impacts are those that might occur during construction of the LPA while jackhammers, rock drills, and impact pile-drivers are being used.” Within weeks of this writing, impact pile-driving on the former Tryg’s restaurant site in the West Lake Station area caused serious damage to the Loop Calhoun condominiums, as well as some level of damage to the Cedar-Isles Condominiums. The contractor, Trammel Crow, had to halt the project and extract the piles, since going forward was deemed to be catastrophic. Yet, the pile driving entailed in building the SWLRT tunnel would take place much closer to these and other condominiums, duplexes and apartment houses. The Trammel Crow incident seems to strongly predict a risk of significant construction-related damage to the homes of hundreds of people who live along the corridor where impact pile driving for SWLRT is planned. The SDEIS does not address this problem.

Furthermore, the recent Met Council sewer project completed in this area caused damage to homes located beyond the “expected” range of distance from construction. Residents who attempted to get compensation for the damage were often told by the Met Council to take the matter up with their own insurance companies rather than through the contractors whose work caused the damage. A specific liability plan and budget should be included in the SWLRT project cost estimates. There is a “contingency” line item in the budget, but it should be reserved for genuinely unpredictable costs that arise during the construction, and not for costs that could be, should be, and even are anticipated.

Construction-related vibration impacts could well extend beyond the construction period itself. Damage incurred during construction may not be initially apparent, and could show up months or even years later.

Further study is needed of:

- 1) The effects of various pile-driving alternatives on the many at-risk structures
- 2) The costs involved with each of those alternatives;
- 3) The geology of the area, and its ability to support the construction process.

## MITIGATION

The SDEIS promises mitigation of a number of vibration problems. However, the failure of Met Council mitigation measures taken to address LRT problems experienced by the University of Minnesota and Minnesota Public Radio cast abundant doubt on whether they will be effective here.

*With respect to the vibration mitigation (to be further detailed in the Final DEIS), the measures suggested in Appendix H appear to be inapplicable to the many residences that would be affected. The SDEIS describes isolated tables and floating floors. It’s hard to imagine a retrofit of the residences impacted by the vibration affects utilizing “floating floors.” If this is the intent of the mitigation planned for the SWLRT, a cost estimate of the retrofit of all the residences should be included in the Final DEIS.*

### 3.4.2.5 Hazardous and Contaminated Materials

Long-term Direct and Indirect Hazardous and Contaminated Materials Impacts

- Permanent pumping of contaminated groundwater
- Impacts of disturbance of dangers in soils that may have long term health impacts on children and vulnerable adults
- Not covered in the SDEIS is the co-location of SWLRT in close proximity to hazardous and explosive materials being carried by the railroad.

## SHORT TERM

The DEIS called for Phase I ESA to be completed, and it was completed in August 2013. It was not made public by the Met Council until May 19, 2015, and indicates many potentially hazardous and contaminated sites along the alignment. It is reasonable to expect to encounter extensive contamination in the Kenilworth Corridor. In addition to being home to several railroad tracks, the Kenilworth Corridor was home to a maintenance yard, blacksmith and boiler shops, a diesel shop and a 90,000-gallon fuel storage facility. In addition, the land was used as a dump — a common practice of the time, and it is likely that arsenic will be among the dangers encountered, requiring special remediation.

The Phase II Environmental Site Assessment (ESA) is said to be near completion; the report must be made available for public review and comment as soon as it is available. The SDEIS says it is “reasonable to expect that previously undocumented soil or

groundwater contamination may be encountered during construction.” It is unclear if any findings in the Phase II ESA have been incorporated into the cost increase recently made public.

The cost of such remediation is unknown and has not been included in the cost estimates. Several sections of the alignment have been designated part of the MPCA Brownfields Program. In the best-case scenario, they will not require much remediation; in the worst case, they will become a Superfund site, requiring significant and expensive remediation.

We attempted to receive budget information that would indicate what amount of the increase in the budget from \$1.65 billion to \$1.99 billion was earmarked for remediation in this corridor. However, the SW Project Office provided only the highest, most general, level of information, claiming that they do not track the line items for things like soil remediation on a segment-by-segment basis, but only in total for the project.

We believe that remediation will require a Construction Contingency Plan above and beyond the general Contingency budget line item. The cost of such a Contingency Plan for Remediation should be included in the project budget.

### 3.4.3 Economic Effects

#### Long-Term Direct and Indirect Economic Impacts

Comment: LRT Done Right disputes the statement that SWLRT will positively impact property values, especially around the 21<sup>st</sup> Street station and Channel. The current freight alignment in the Kenilworth Corridor is already a negative and permanent defect affecting the value of properties along the line, one that would only be magnified by co-location of SWLRT. This is precisely why some residents argued against co-location. The threat of a collision and derailment — such incidents are gaining increased attention in the news media — will in all likelihood increase the scrutiny of buyers as they evaluate the Kenilworth area as an investment and home for their families. Further, the increased noise, vibration, and (nighttime) light from SWLRT, without the previously promised removal of freight rail, would exponentially increase aesthetic disturbance in a neighborhood that until now has been desirable for its park-like feel and up-north atmosphere. The increased adverse effects of co-location will represent a permanent defect to homes within earshot and sight of the line; based on the audible sounds of the current freight line, auditory adverse effects would reach as far as Lake of the Isles Parkway, but those sounds would no longer be the low rumble of freight, but a much more disruptive cacophony of bells and horns.

Further, while studies such as [rtd-fastracks.com](http://rtd-fastracks.com) and others show that access to light rail can increase property values in areas of high density, especially in transient (apartment-filled), younger, urban neighborhoods, the area around the Kenilworth corridor does not wholly represent those attributes. The study mentioned, among others, shows that higher income and low-density neighborhoods, which also comprise this neighborhood, do not experience the same positive impact on property values and rentals as do lower-to-middle-income neighborhoods where public transit is more generally used.

While the Met Council’s 1,600 rides-per-day estimate is unrealistic and unsubstantiated, there will nonetheless be an adverse impact from those who do park in the neighborhood to access the station, resulting in residents closest to the station losing street parking in front of their homes. This would be a disincentive to potential buyers, and negatively impact home values.

We do not support changing the character of the neighborhood with dense development (with the exception of the West Lake Station area, assuming that land is available). Such development would not be feasible on any meaningful scale due to the mature and stable nature of the neighborhood and minimal available free space. Development would denigrate the existing green space in the corridor, especially around the 21<sup>st</sup> Street station, which is the access point for the beach and trail access for the neighborhood.

We believe the negative economic impact on the entire “brand” of the City of Minneapolis incurred by running a divisive, noisy, and environmentally unsound line through one of the crown jewels of “The City of Lakes” park area will forever have a negative impact on tourism as LRT will disturb the current serenity of the channel, lagoon and lake. The larger, oppressive, industrial-scale bridge will downgrade the experience currently enjoyed by kayakers, walkers, bikers, etc., and cause tourists to leave the city to obtain that natural experience they once enjoyed in Minneapolis.

Finally, we have identified a number of issues not recognized in the SDEIS that will require, by our calculation, initially at least \$13 million to \$24 million of investment above and beyond the projected \$1.65 billion budget goal, and additional costs in perpetuity.

- *\$1 million to \$5 million* — For permanent dewatering of contaminated soils; this will require an extra sewer line in Kenilworth. The City of Minneapolis will need to approve this, since it owns the sewer. The city did not approve this for the 1800 Lake building and went to court over it; would they approve it, on a much larger scale, for SWLRT?
- *\$5 million to \$10 million*: For polluted soil removals. Known polluted soil conditions will require mitigation of thousands of tons of soil, but since the extent of pollution is unknown, the cost may be much higher. This cost will likely be in the millions for Kenilworth section alone; MPCA will need to approve and may add scope/cost.
- *Unknown millions*: For construction-related damage to existing buildings, including possible buy-out of impacted buildings. We understand that there is no way to guarantee that the Calhoun Isles Condominium towers will not be damaged by construction beneath their foundations. What is the current value of these condos?
- *\$3 million to \$5 million*: For relocation of existing sewer force main, pump station, ongoing operational costs of a new pump station.
- *\$4 million annually*: In lost property tax revenues. Approximately \$2 billion of the City of Minneapolis' net \$35 billion tax base is located within 1,000 feet of the Kenilworth Corridor. Most of this \$2 billion is commercial property taxed at 4 percent of value and some is from some of the city's highest-priced homes. Annual taxes from these properties are about \$80,000,000. A decline of just 5 percent in property tax value in this area would equate to an annual loss of \$4,000,000 per year to the City of Minneapolis. Forever. The Met Council would be clobbering one of the golden geese that currently supports Minneapolis Equity Transfer Payments. This area is built out already and limited by zoning from growing further, so there is no net benefit to the city if there is no new growth.

We therefore dispute and challenge the SDEIS statement that mitigation for economic impacts is not warranted for the Kenilworth Corridor, particularly in the absence of any plausible property impact study.

### 3.4.4.2 Roadway and Traffic

Comment: LRT Done Right is concerned about emergency access being reduced 12 times per hour to East Cedar Lake Beach and the residences on Upton Avenue S. The freight train, which was originally to be removed, coupled with the light rail line, will exponentially impair access further. We see no possible way to mitigate this impact even beyond the measures that are mentioned in the SDEIS.

### 3.4.4.3 Parking

Comment: LRT Done Right is concerned that there is complete disregard in the SDEIS for the impairment of on street parking availability in its neighborhoods for residents and their guests, as well as emergency access to those homes, especially in winter when streets are narrowed. LRTDR strongly opposes any park and ride lots as that would significantly impair the parklands and would not be compliant with Minneapolis city policy.

### 3.4.4.4 Freight Rail

#### A. Existing Conditions

Comment: It is very troubling that, contrary to all previous planning, the SDEIS now claims that the need "to develop and maintain a balanced economically competitive multimodal freight rail system" as a justification for the Southwest light rail project (page 1-1). With little public awareness of this new "need," the project has morphed so that approximately \$200 million in local and federal *transit* dollars will be used to improve *freight* rail.

In 1998, when freight was reintroduced to the Kenilworth Corridor, freight was to be a temporary alignment until light rail could be built. All along, this promise was made to the City of Minneapolis, the Cedar Isles Dean neighborhood, the Kenwood neighborhood, and others as a basis for agreement to the project. That none of the responsible parties, including elected officials who are still deeply involved in the SWLRT planning process, secured appropriate legal documentation of this agreement at the time is beyond disturbing.

The 2005-2007 Alternatives Analysis assumed that “freight would be relocated to make way for light rail.” Since freight was not taken into account at this stage, neither Hennepin County nor the Met Council conducted an honest and realistic analysis of alternative ways to serve the southwest suburbs’ transit needs. The financial, political, and environmental costs of addressing freight rail in the Kenilworth Corridor were not considered.

When the Locally Preferred Alternative (LPA) was selected in 2009-2010 under the assumption that freight rail would be relocated and that LRT would run at-grade in Kenilworth, the costs and concerns of freight relocation were again not addressed.

The Project Scoping Report for the 2012 Draft Environmental Impact Statement said clearly, “Freight Rail is independent of the Study.” Although the Federal Transit Administration (FTA) noted this erroneous assumption when it approved preliminary engineering, neither Hennepin County nor Met Council ever amended the project scope to include freight rail.

The Municipal Consent process was designed so that once a project’s elements and impacts are known, public officials can make informed decisions. However, since freight co-location with LRT and tunneling were never part of the original LPA and subsequent DEIS, the City of Minneapolis was pushed in 2014, under threat of project cancellation, to grant municipal consent without foreknowledge of the risks to both community and environmental safety.

Now this SDEIS is similarly devoid of important human and environmental safety information around co-location of freight and SWLRT. It is remarkable more for what is **not** included than what is included. Substantive issues remain unexamined, especially in Sections 3.4.4.4 (Freight Rail) and 3.4.4.6 (Safety and Security). The SDEIS only addresses the effects of LRT on freight rail (mostly economic impacts to minimize time lags on freight during construction), not the environmental and safety effects of co-location of freight and light rail through the corridor. It says nothing about substantive safety concerns of co-locating high-hazard freight feet from LRT construction and LRT trains in operation.

**Kenilworth — and the SWLRT with co-location — is in the “Blast Zone.”**



Nationwide, communities are becoming increasingly aware of high hazard freight – often referred to as “bomb trains” — operating in their midst. High-hazard trains have long run through our towns and cities, but never with the frequency nor the amount of dangerous materials now being hauled. Running such trains through any populous areas is undesirable and puts many human lives within a “blast zone,” running 1/4-1/2 mile on either side of the track.

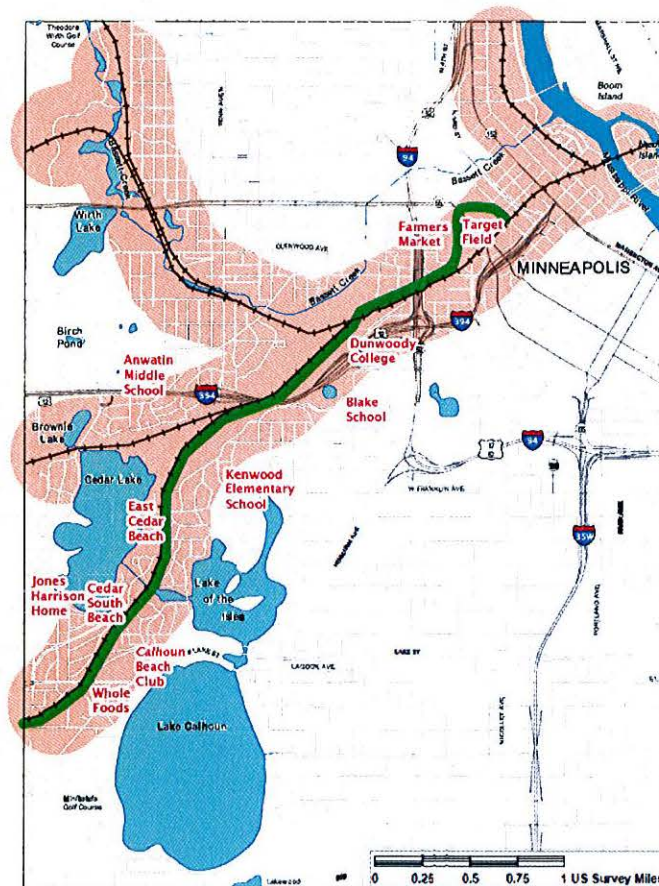
**The Kenilworth corridor is a high-risk evacuation blast zone.**



Below are two representations of the Blast Zone. The map applies the definition of the Blast Zone, as commonly defined by many national groups with interest in the issue, and the chart depicts the number of residents in the blast zone. Each green circle represents 100 residents.

## - THIS IS THE BLAST ZONE -

**SWLRT co-location with high hazard freight trains  
in the Kenilworth corridor**

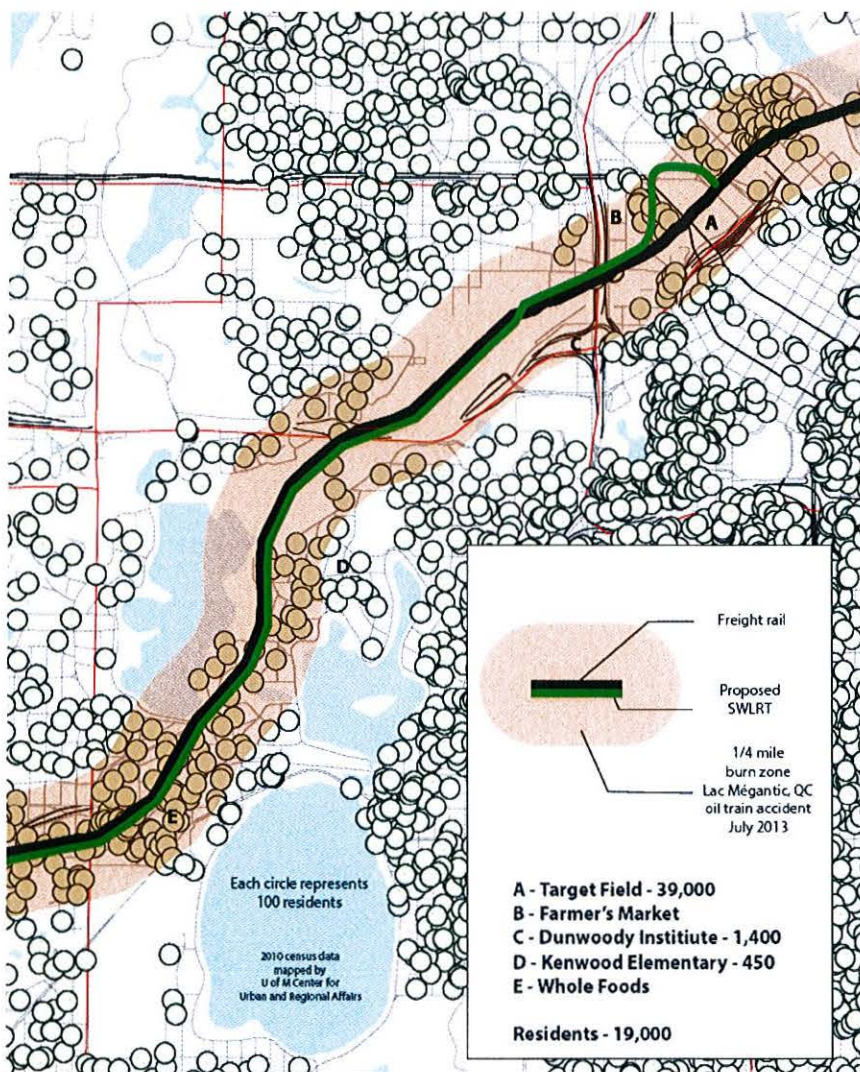


**Ethanol and Oil Train Disasters:**





**Population density map of the Blast Zone – Kenilworth Corridor. Please note that the blast zone includes Target Field.**



Comment: Freight railroads have radically changed since the reintroduction of freight into the Kenilworth Corridor. The federal mandates on ethanol, the running of unit trains carrying single high-hazard products, and the use of much longer trains have increased freight safety concerns. The privately owned TC&W is currently the only freight company that is allowed to take trains through the corridor, but it can connect to any other carrier and currently partners with Canadian Pacific to carry its products through Kenilworth. Federal rail policy requires that the interests of freight rail operators and shippers be considered in the development of passenger rail service.

In order to provide elected officials, policy makers, and members of the public with current, factual, and supportable information about the impact of TC&W and its operations, TC&W commissioned a study in 2013. According to this report by Klas Robinson,<sup>12</sup> "TC&W provides rail service to numerous companies in Minnesota and neighboring South Dakota, hauling such diverse products as corn, soybeans, wheat, sugar, vegetables, ethanol, crushed rock, metals, plastics, potash, fuel oil, distillers oil, machinery, lumber, manufactured goods, propane and fertilizer, including anhydrous ammonia." Ethanol, propane, fuel oil and fertilizers are all high-hazard products. Distiller's oil and potash are also *flammables*. Exposure to even small amounts of anhydrous ammonia

<sup>12</sup> *Economic Impact of TC&W Railroad's Freight Operations*, September 2013; <http://tcwr.net/wp-content/uploads/2013/10/TCW-Impact-Final>.

can cause serious burning of the eyes, nose, and throat. Exposure to higher levels causes coughing or choking and can cause death from a swollen throat or from chemical burns to the lungs. A single tanker car of anhydrous ammonia can put hundreds or even thousands of area residents at risk in case of derailment and breach.

Through 2012, the report says, "customers of Twin Cities & Western Railroad Company and its affiliates shipped more than 23,400 cars, including almost 17,700 cars on TC&W and over another 5,700 cars on a short line railroad that uses TC&W to reach the Twin Cities." That number continues to expand annually, with "the number of monthly cars shipped on TC&W during the first four months of 2013 significantly higher than for the same periods in each of the three prior years — almost twice that of first quarter 2012 (94.0 percent greater), almost 40.0 percent higher than first quarter 2011 and 70.0 percent greater than first quarter 2010." As the economy continues to improve since the recession of 2008, we can expect that the number of train cars and the frequency of trains will increase. According to the Minnesota Department of Agriculture, between 2000 and 2011, ethanol production in Minnesota increased by over 5 times and each subsequent year has continued this trend. With the nation-wide federal mandate to increase ethanol in gas to 20 percent, we can also expect the production and transport of these high-hazard products through the corridor to increase dramatically. It is clear that the TC&W that was temporarily reintroduced in the corridor in 1998 is not the TC&W that runs through the corridor now.

According to TC&W, they "have Class I rail connections to Canadian Pacific, Union Pacific, BNSF Railway and Canadian National, reaching markets in 39 U.S. states, seven Canadian provinces and four Mexican states." Their network would potentially allow them to carry anything including nuclear products, Bakken Oil, anhydrous ammonia, chlorine, and other hazardous freight. Common Carrier freight legislation requires that shippers (currently TC&W and CP) carry anything that their customers demand. Additionally, *at any point TC&W could sell their company to one of the major railroads, such as BNSF, which could generate 10 times as much traffic and introduce exponentially more hazardous materials into the corridor. Making freight rail permanent in Kenilworth increases the chance that this will happen.*

The Pipeline Hazardous Materials Safety Administration (PHMSA) controls the safety of freight trains. Historically, PHMSA standards have been lax, prioritizing commerce over safety and the environment. Recently, after public pressure, PHMSA has toughened safety standards for most railroads. ***Please see LRT Done Right's prior correspondence on this matter at the end of this response, starting on page 38.***

However, TC&W, which is a Class III rail carrier (a short line with lower revenues), has been and continues to be exempted from certain safety standards that guide more profitable and larger Class I and II railroads. Ethanol is carried in DOT-111s and this type of car will not be banned, according to PHMSA for another 5-7 years. Railroads have lobbied heavily to remove current and future regulations on them to maximize their profits, including recently passed braking mechanisms on the hazardous cars. They have lobbied to go from two-person crews to one- or two-person crews. A single-person crew would reduce safety due to overload, fatigue, etc. And railroads have fought to delay the introduction of safer double-hulled tanker cars and to continue to carry their hazardous cargo in dangerous substandard DOT-111 freight tanker cars. Freight infrastructure has suffered, and nearly all derailments are due to substandard equipment, track failure or operator error. Some new PHMSA standards that attempt to improve safety of hazardous freight *may not even apply to TC&W due to their Class III status*. Class III railroads also have less money to invest in infrastructure, and it is clear that this railroad has infrastructure issues, experiencing a derailment in 2010. Despite replacement of rails to single-weld track in 2012, TC&W still suffers from infrastructure issues, like rotting cross ties, missing rail plates and the missing rail spikes that hold the rails in place. From May 2015 to July 2015, deep potholes have bordered the track at the Cedar Lake Parkway crossing, and have gone unfixed despite calls to TC&W and MNDOT.

The mix of commodities that TC&W carries has changed over time, with approximately 30 percent of TC&W's freight being ethanol. It has only been in the last 5 to 10 years that unit trains of a single commodity have been a common occurrence. Prior to that, manifest trains, carrying a variety of commodities were much more common. *Unit trains of 100 cars of ethanol*, a highly flammable product, now frequently traverse the corridor. Through the planning process, the Met Council repeatedly told members of the public that the primary products carried by freight through Kenilworth were agricultural — which sounds innocuous enough. But while ethanol may be an agricultural product, it is hardly innocuous. According to Karl Alexy of the FRA, ethanol is more dangerous than most crude oils, with a lower ignition point, and higher explosive potential. Its Hazard Packing Group rating (II) is higher than most crude oil (because of its explosive potential). With respect to oil, only Bakken Crude matches its danger due to the high level of byproducts added to Bakken oil and its consequent instability. Ethanol burns hot enough (3,488 degrees F) to melt steel structures. The freight through Kenilworth currently runs only feet from bridges and mere inches from a high-rise condominium that would be vulnerable in the case of a derailment.



The Freight Rail Administration (FRA) estimates that there will be at least 10 to 20 oil or ethanol derailments per year going forward. Nationwide, we had over 7,000 train derailments of some kind in 2014. *These concerns are not just theoretical.*

Further, *we strongly object to the Met Council requesting that the FRA abdicate its jurisdiction over freight rail* in the Kenilworth Corridor and elsewhere along the SWLRT line. The Met Council has requested waivers from the FRA to put jurisdiction of the co-located corridor under FTA. We have no evidence that the Met Council or the FTA are qualified to oversee the combination of LRT and freight rail in the same corridor, particularly in such close proximity. We are extremely concerned that the FRA may be relinquishing its jurisdiction, except for five named at-grade crossings where both freight and LRT cross together, and even here the Met Council could apply for a crossing waiver.

The existence of freight alone is of great concern to residents and users of the Kenilworth Corridor. The construction of SWLRT running right next to high hazard freight is alarming. *None of these facts or concerns is reflected in the current SDEIS.*

## **B. Potential Freight Rail Impacts**

### **Long-term direct and Indirect Freight Rail Impacts**

*For reference to LRT Done Right's commitment to freight safety in the Kenilworth Corridor, please see the addendum at the end of this response.*

Comment: Hazardous freight has become a nationwide problem. By choosing to co-locate freight and light rail, despite all previous planning, the Met Council is choosing to exacerbate this problem in the Kenilworth Corridor. The addition of LRT to a corridor that does not meet the minimum American Railway Engineering and Maintenance-of-Way Association (AREMA) safety guidelines of a 25-foot separation center-to-center rail is shockingly unsound. In fact, AREMA now recommends a 200-foot separation as optimal. Although narrow corridors that contain both freight and passenger trains and do not meet minimum safety standards currently exist in parts of our country, an increasing awareness of freight dangers has meant that going forward, communities are much more exacting with regard to safety standards and meeting minimum AREMA guidelines. In fact, we can find no other project currently under construction that won't meet at least the minimum 25-foot grade separations. *The SWLRT project does not meet current AREMA best practices.*

The many risks of running freight next to LRT are unmentioned in the SDEIS, even though we know that the majority of freight or LRT derailments are either track failures or operator error. There is nothing in the SDEIS that deals with an *evaluation of risk or readiness of dealing with a derailment*, especially of a high-hazard product.

LRT catenary wires that regularly spark off the pantographs will run in some places 10 to 15 feet from freight trains. In 2014 alone, FRA reported 43 "accidents" in the United States related to pantographs. There was one in St. Paul within the last few months. Even with the eventual placement of crash walls, catenary electrification would run immediately adjacent to highly flammable unit trains (80 to 125 tanker cars) of ethanol. Ethanol is vulnerable to ignition by electrostatic charges and has a higher ignitability than most forms of crude oil. Vents at the top of ethanol tanker cars will run close to those electric wires.

TC&W and C&P trains use DOT-111 tanker cars. These trains regularly traverse the Kenilworth Corridor carrying ethanol, fuel oil, propane, fertilizers (including anhydrous ammonia), distillers' oil, and potash. These old-generation tanker cars have single hulls prone to thermal tears and punctures, and leaky valves. They are more likely to tear or puncture than newer generation replacements like the double-hulled DOT 117s. The National Transportation Safety Board (NTSB) discovered problems 24 years ago with DOT-111 tankers but USDOT did nothing. In 2012, the NTSB called for an immediate ban on using these tank cars to ship high-hazard products like ethanol and crude oil because they are prone to punctures, spills, fires, and explosions in train derailments. Two in three tank cars used to transport crude oil and ethanol in the U.S. are DOT-111s, yet the DOT has taken no action beyond issuing a safety advisory urging shippers to use the safest tank cars in their fleets to the extent feasible. Only recently has PHMSA come out with new regulations to replace these dangerous tankers over a six-year time period. Loopholes exist in the regulations, however, making it all but certain that single-hulled DOT-111s trains will continue through Kenilworth for years to come.

Another serious concern with freight is the misclassification of rail cars. PHMSA first launched Operation Classification in the summer of 2013, in response to increased activity in the Bakken region. Initial testing has revealed that 61 percent of high-

hazard oil was misclassified. Sometimes the train manifest may not actually reflect what being transported by the freight. The extent of misclassification of TC&W's rail cars is not currently known.

According to the Department of Homeland Security, high-hazard train tankers are vulnerable to terroristic threats. The proposed electrically-powered SWLRT would run adjacent to ethanol-bearing freight through St. Louis Park and the Kenilworth Corridor all the way into downtown. Around the area of Dunwoody, the TC&W tracks merge with those of BNSF tracks, which have been documented as carrying crude oil.<sup>13</sup> Farther on, the freight trains (some carrying ethanol and some carrying Bakken crude oil) join LRT and Northstar Commuter rail in tri-location, until they stop at the Target Station. Thus, while ethanol and crude oil trains already represent risks to Twins Stadium and Target Station, the addition of LRT would expose even more people to potential danger.

The Department of Homeland Security identifies places like the Twins Stadium and the Target Station as high-value targets vulnerable to terrorism. The co-location of freight and passenger trains carrying 10,000 thousand tons of highly combustible products underneath the Twins Stadium and to the Target station is a disaster that can and should be prevented. Were high-hazard freight not running through this corridor, as was originally envisioned with relocation of freight, then the concerns of terrorism would be diminished. However, tri-location of high hazard freight, Northstar commuter trains and SWLRT near to and underneath the Twins Stadium to the Target Station is planning gone awry. If we believe that terror groups are unaware of these high value target vulnerabilities in our system, we are likely sadly mistaken. Regarding the multiplicative risks and risk readiness related to tri-location of high-hazard freight, Northstar, and SWLRT under the Twins Stadium and to the Target Station, the SDEIS contains no acknowledgement.

In fact, even after a multitude of concerns were raised by the City of St. Louis Park and its residents in response to the relocation of freight proposed the 2012 DEIS, *the current SDEIS does not contain one word acknowledging high-hazard freight through Kenilworth*. There is evidently no safety plan should an ethanol or other hazardous materials freight derailment to occur, and no containment and recovery planning should a disaster encroach on the tunnel and/or spill in to the Minneapolis Chain of Lakes.

Hennepin County, the Met Council and the State of Minnesota have little power going forward in determining whether or not TC&W's model of business changes in ways that would increase risk. They also have no ability to intervene if TC&W should choose to sell. These risks to the Kenilworth area are only likely to increase as federal mandates to increase the mix of ethanol from 10 percent to 20 percent in gasoline mixtures are initiated. TC&W could choose to sell, likely to BNSF, likely increasing the frequency and length of trains in this corridor and transportation of an even greater mix of hazardous chemicals.

Currently, TC&W reports that trains go 10 miles per hour through the Kenilworth Corridor, but this is voluntary, not mandated. Going forward, the company may choose to sell to a company that does not respect this speed limit or TC&W may decide to increase speeds. The necessity of slow freight (even beyond the LRT construction period) is critical in an urban recreational corridor and a *long-term enforceable agreement with the freight operator and the Hennepin County Regional Rail Authority should be considered as part of this project*.

Further, heavy freight causes vibrations that travel through the ground. The ground substructures affect vibrations, with waterlogged soils tending to increase those vibrations. We see no evidence that the potential for long-term damage to LRT structures from vibrations of heavy freight – and the related long-term costs in terms of maintenance dollars and human safety – have been considered. Potential damage to residences and other buildings from freight vibrations is also ignored in this SDEIS.

Finally, the SDEIS does not explore Met Council liability if SWLRT or freight derail or otherwise cause damage or harm. Currently, freight companies carry limited liability that only covers their rolling stock and train infrastructure. In light of the catastrophic potential of any accident in the Kenilworth Corridor, *this insurance liability assessment should be done* prior to building SWLRT, then made public and included in construction and operating cost estimates.

## Short-Term Freight Rail Impacts

Comment: During construction, the dangers to the community will be exacerbated due to the fact that freight, particularly freight carrying hazardous materials, will continue through the corridor.

<sup>13</sup> Photos taken on 7/21/15 of a BNSF train in this segment of the route, before and after it merges with the TC&W route, show cars bearing 1267 petroleum crude oil DOT placards; presumably these cars are carrying Bakken crude.

First, it's not clear that there is room in corridor for the construction plan as described. While we've seen various calculations of the corridor's narrowest point, our understanding is that it measures 59 feet. This point is located between the historic grain elevators – the Calhoun Isles Condominiums – on the east and the Cedar Shores town homes to the west. The SDEIS states that the freight tracks will be moved 2 to 3 feet closer to the town homes. The tunnel trench (35 feet wide) will be dug at the base of the Calhoun Isles Condominiums about 18 inches from its footings. There will be a buffer between town homes to the east of 22 to 24 feet; the freight train is about eight feet wide. Thus: 35 feet trench + 2 feet from condos + 24 feet from town homes + 8-foot wide freight train = 69 feet — to fit into a 59-foot pinch-point. This math does not inspire confidence in the safety of the construction plan.

During construction, freight will run through a construction zone with construction workers and debris with **no crash walls** at the edge of a 35-foot construction trench. It will continue to carry high-hazard freight including ethanol, fuel oil, and fertilizer. (Under common carrier obligation, TC&W or CP must carry whatever else their shippers ask them to carry and we may or may not know what these trains are actually hauling.) “Bomb trains” will travel at the edge of a construction pit that will take two years to complete. Even with the precautions suggested in the SDEIS, a derailment is far from unimaginable in this scenario. The proximity of the condominiums and town homes puts hundreds of people at risk for devastating consequences.

It is also important to note that the current poor condition of freight rail infrastructure increases the risk for a short-term freight derailment both during and after construction. A recent obvious example: From late May through July 2015, two pot holes immediately next to the rail at the Cedar Lake Parkway freight crossing measuring as deep as 6 inches have remained unfilled despite being reported to DOT and to TC&W. In 2010, there was a derailment in the neighborhood of a TC&W train; Hennepin County replaced the track through Kenilworth with a safer single-weld track. However, rotted freight ties were not replaced at that time, nor were rail plates and spikes uniformly repaired. Currently, there are rail ties that are completely rotted out, missing rail plates that hold the ties to the rails and many missing rail spikes. That these were not repaired when the rail was replaced indicates poor maintenance and raises concerns about the competence that Hennepin County and the Met Council will bring to the co-location element of the SWLRT project.

Construction debris in the corridor will heighten the risk of derailments. Derailments are caused by operator error or track failures, including track impediments. Construction can displace the supporting structures that bolster rail, and although engineers can try to bolster the structures through shoring, there will be nothing to stop a train if it begins to tip into the construction pit. Tip guardrails have been suggested as a solution (not in this SDEIS), but these can build up with snow and actually cause derailments.

Nighttime running of freight (also not considered in the SDEIS) will be perhaps even more dangerous than daytime. Construction debris may be left near or on tracks and may not be visible to the freight engineer at night. Final day inspection of track is imperfect and human error could easily miss track impediments.

Inclement weather like snow may mask destabilization of freight infrastructure, and rain could wash out the surrounding already disturbed soils, increasing the derailment risk during construction. While this is true under any construction scenario, the risk multiplies with freight running next to the tunnel construction pit.

If a derailment were to occur during construction, access to fire safety equipment is extremely limited because of the nature of the corridor: in some places, the only access is between people's homes and/or through their driveways. In the event of a derailment occurring during construction, the only access for fire trucks may be from West Lake Station, 21<sup>st</sup> Street or Cedar Lake Parkway. Fire equipment must be accessible in case of a derailment emergency, and in-depth coordination among the fire department, the Met Council, and the citizens has not been attempted or even mentioned in this SDEIS.

In case of any chemical freight derailment, chemical fires must be fought with specialized foam products, usually foam specific to the chemical spill. These fires cannot be fought with water, which can actually spread a chemical fire. Water can be used to cool rail cars that have not ignited, but foam is necessary to put them out. Limited foam is available at local fire stations, but our understanding is that it can take 2 hours or longer to access the necessary quantity of foam to fight a chemical derailment fire.

Currently, TC&W reports that trains go 10 miles per hour through the Kenilworth Corridor, but this is voluntary, not mandated. Going forward, the company may choose to sell their company or increase that speed. The necessity of slow freight even without LRT construction is critical, but with construction the danger becomes critical at any speed.

According to TC&W president Mark Wegman, there had only been one meeting as of June 2015 (i.e., in preparation for the SDEIS) with SWLRT project staff to discuss issues of joint construction concern. This seems shortsighted. Our community expects more than superficial consideration of these serious construction-related concerns prior to decisions about the feasibility of moving forward with the SWLRT project.

Finally, the SDEIS does not explore Met Council liability either during or following construction if SWLRT or freight derails causing a train catastrophe. Currently, freight companies carry limited liability that only covers their rolling stock and train infrastructure. This assessment should be completed and made public prior to SWLRT construction.

### **C. Mitigation Measures**

Comment: It is difficult to respond to this section surrounding freight since no problems with co-location have even been acknowledged in the SDEIS. There is no real analysis of the effects of co-location and the danger of running high-hazard freight through the Kenilworth Corridor both during and after construction, and in an area that does not meet minimum AREMA guidelines, let alone best practices. This SDEIS is astounding more for what it does not contain than what it does. The mitigation proposed concerns only making sure that the freight schedule is unimpeded; it ignores concerns about the safety of neighborhood residents, construction and freight personnel, park and trail users, or future SWLRT riders.

Minimally, during construction, high-hazard freight **MUST** be diverted from the corridor. Long term, crash walls between freight and LRT are critical. In the short term, without crash walls, **ALL** hazardous or flammable freight should be rerouted out of the corridor until proper safety crash walls are present. The idea of running high hazard freight during construction at the edge of a construction trench without crash walls is extremely concerning.

The treatment of freight rail in this SDEIS indicates that the Met Council is not even aware of the danger to area residents, waterways, parks, trails, or SWLRT passengers. The many issues related to making freight rail permanent in the Kenilworth Corridor and co-locating freight and light rail need much greater study and consideration before this project advances.

### 3.4.4.5 Bicycle and Pedestrian

**Because there would be no long-term adverse impacts from the LPA on bicycle and pedestrian facilities, no long-term mitigation measures have been identified. Short-term effects on pedestrian and bicycle routes will be mitigated through signage, information fliers, website postings with maps of construction areas/detours, and notices placed at bicycle shops, for example.**

Comment: At last measure, our understanding is the trails receive 600,000 discrete unique visits per year and those visits to current parkland are enhanced by the current “north woods” feel of the area, and that experience would be significantly impaired by the addition of light rail. This includes an expectation of natural quiet conditions. Pedestrians do not pass quickly through the park-like environment and will therefore be significantly impacted by added noise, movement and infrastructure of the LRT and freight rail. The speed joined with the noise at close proximity greatly detracts from the trail experience for both bicyclists and pedestrians, and can even be frightening to users.



### 3.4.4.6 Safety and Security

#### LONG-TERM IMPACTS

Comment: The current plan to co-locate freight and LRT within the same corridor — within a dozen feet of each other in certain places — creates new, potentially catastrophic hazards. It is currently proposed that the freight train (which carries volatile and explosive ethanol on a daily basis, and several unit trains of ethanol per month) remain permanently in the Kenilworth Corridor. The addition of the SWLRT with its electrical power wires only a few feet away exacerbates the existing danger of ethanol in the corridor. Current safety standards recommend against co-location in such close proximity when there are alternatives; other alternatives for this SWLRT alignment must be explored.

Furthermore, in the event of an explosion of ethanol trains along this corridor, we understand that the foam retardant required to extinguish the fire is “within a 3 hour distance” of the corridor. We believe that the potential harm during that “3 hour window” along with permanent damage to residences and residents should be quantified. Should an explosion occur during the passing of an LRT train, the potential exists for loss of life or harm to those exposed to the hazardous fumes.

Please note that the Minneapolis Park Police also provide service within the study area. KIAA requests that the MPRB Police be consulted on security issues related to the impact of a proposed station at 21<sup>st</sup> Street on East Cedar Lake Beach (Hidden Beach) and their input be incorporated into final design plans. In the summer of 2012, Hidden Beach generated more police actions than any other park in the MPRB system. For the last five years, KIAA has provided supplementary funding to the Park Police to allow

for increased patrols in this area. The neighborhood has expressed grave concern that an inadequately managed station would increase opportunities for illegal behavior.

### SHORT-TERM IMPACTS

Currently, rush hour traffic produces daily gridlock that sometimes extends from Lake Street, along Dean Parkway, Cedar Lake Parkway, Wirth Parkway, and Wayzata Boulevard (frontage road along I-394) all the way to the Penn Avenue Bridge. (This situation existed even before the construction at Highway 100 in St. Louis Park.) The closing of a critical crossing (Cedar Lake Parkway at the Kenilworth Trail) would be necessary during the construction of the proposed tunnel from West Lake Street to just past Cedar Lake Parkway. Affected neighborhoods already have limited entry and exit points.

The SDEIS does not address the need to ensure reasonable transportation options during this period, including routes for emergency vehicle access. There must be plans for fire and ambulance routes in the affected neighborhoods. Travel time for emergency vehicles would be increased during that closing. The SDEIS describes such delays as “minor”; we take vigorous issue with such a demotion of safety concerns, as even two minutes could be the difference between life and death, or a home being saved from fire or destroyed. (On June 11, 2015, an accident at Dean Parkway and Lake Street slowed traffic on Dean Parkway to a crawl for over an hour.)

Also missing is information on what measures, including evacuation plans, would be necessary to protect the Cedar Shores townhomes when the TC&W trains, with their explosive freight, are moved several feet closer to them during construction. Our neighborhoods were recently impacted for upwards of a year by a Met Council sewer-replacement project, with road closures (of which we were frequently not informed) and detours. As noted earlier, we understand that the sewer project would need to be re-done as part of the SWLRT tunnel-construction.

### 3.5 Draft Section Evaluation Update

Comment: The SDEIS is almost incomprehensibly dense and convoluted as it discusses the application of Section 4(f) to the LPA. For the benefit of the reader, the Section 4(f) statutory mandate is clear:

“Section 4(f) protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance and historic sites of national, state, or local significance from use by transportation projects. These properties may only be used if there is no prudent or feasible alternative for their use and the program or project encompasses all possible planning to minimize harm resulting from its use. If transportation use of a Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required.”

Conversely, if there is more than a *de minimis* impact, an analysis of avoidance alternatives is required. Thoughtful analysis of avoidance alternatives is absent from the SDEIS.

A cursory reading of the SDEIS will reveal that there is not a good-faith analysis of prudent or feasible alternatives. “No Build” and “Enhanced Bus Service” were the only two alternatives considered, and only superficially; they were presented to the public in a cursory manner and without documentation. Not surprisingly, neither of them is considered feasible or prudent. Alternatives that *would* likely be considered feasible and prudent, such as a deep tunnel or rerouting, were not considered. Consequently, the bulk of the 4(f) analysis is used to contend that any adverse impact on 4(f) property will be *de minimis*.

These comments will focus almost entirely upon the Kenilworth Channel/Lagoon section of the LPA but are equally applicable to other section 4(f) properties identified by the SDEIS. The FTA, although identifying property subject to Section 4(f), fails throughout to adequately analyze or identify specific mitigation steps that would render impacts *de minimis*.

### The Kenilworth Channel/Lagoon

At page 3-259, referencing the Kenilworth Channel/Lagoon, the SDEIS concludes:

“Through coordination with MPRB to date and based on the design and analysis to date as described in this section, FTA has preliminarily determined that the proposed permanent and temporary uses by the LPA would not adversely affect

the features, attributes or activities that qualify the Kenilworth Channel/Lagoon for Section 4(f) protection. Consistent with the requirements of 23 CFR 774.5(b), FTA is, therefore, proposing a *de minimis* use determination for the LPA at the Kenilworth Channel/Lagoon.

To understand the absurdity of this conclusion, one first should acknowledge that the Kenilworth Channel/Lagoon is one of the most important elements in the Minneapolis Park Board's Chain of Lakes (and also identified as subject to Section 106 because of its historic character). It is primarily appreciated for its pastoral quality and is used by walkers, bikers, kayakers, cross country skiers, ice skaters, fishermen, picnickers, and visual artists.

The FTA's own analysis identifies these activities and elements and acknowledges that the LPA would constitute 4(f) use but then, after an evaluation of the impacts, concludes that the use of the protected land will be *de minimis*. This of course means that there need not be a feasible and prudent alternative analysis.

### Visual Impact

Per the SDEIS, visual impacts to the Kenilworth Channel/Lagoon will be:

1. Removal of two existing and potentially historic wooden bridges
2. Construction of massively larger bridges
3. Modification to topographical features, vegetation and WPA-era retaining walls.

Particularly astonishing is the statement at page 3-254 that the

"horizontal clearances between the banks and the new [bridge] piers would be of sufficient width to accommodate recreational activities that occur within the channel lagoon"!

The same thing could be said about an 8-lane super highway bridge spanning the channel. The point is that the altered scale of the proposed bridges will in fact be jarringly disproportionate to the channel's features. Not a *de minimis* impact by any stretch of the imagination.

The SDEIS goes on to note that the vegetation clearing necessitated by the new bridges would cause some reduction to the "visual quality of the view". But, the document goes on to reassure –

"[T]he bridges as currently conceived would have an attractive design that would become a positive focal point in the view. The overall change to the view's level of visual quality would be low. Because of the recreational activity in the channel, this view is visually sensitive. Even though the view is visually sensitive, because the potential level of change to visual quality will be low the potential visual impact will not be substantial."

Thus the reader is simultaneously warned and reassured that everything will be visually pleasing because a planner's aesthetic judgment about the visual quality of yet-to-be-designed bridges will be "attractive."

### Noise Impact

It gets worse as the FTA pursues *de minimis* findings. The SDEIS acknowledges that two separate areas of the Kenilworth Channel/Lagoon are noise receptors and would be subjected to moderate noise impacts. There is a non-specific undertaking to utilize mitigation measures to reduce the area of Moderate noise impacts closest to the new bridges.

No such undertaking is offered with respect to the northern bank of the lagoon. Instead the SDEIS states:

"The northern bank of the lagoon [section 4(f) property], generally between West Lake of the Isles Parkway and South Upton Avenue (termed the Kenilworth Lagoon Bank in the noise analysis), was classified as a Category 1 land use, with stricter noise impact standards than the Category 3 land use. However, because of the distance between the light rail



tracks and the western point of the Category 1 land use, *noise levels under the LPA at that location would not exceed FTA's Severe or Moderate criteria.*"

Apparently there is not an intent to mitigate noise in this area as legally required.

#### **Not Mentioned**

Completely missing from the 4(f) analysis of the Kenilworth Channel/Lagoon is an analysis of the impacts of vibration and safety.

#### **Minneapolis Park and Recreation Board**

The SDEIS fails to address the previous objections of the MPRB: Instead it attempts to portray the MPRB as a willing partner:

"Through coordination with MPRB to date and based on the design and analysis to date as described in this section, FTA has preliminarily determined that the proposed permanent and temporary uses by the LPA would not adversely affect the features, attributes or activities that qualify the Kenilworth Channel/Lagoon for Section 4(f) protection. Consistent with the requirements of 23 CFR 774.5(b), FTA is, therefore, proposing a *de minimis* use determination for the LPA at the Kenilworth Channel/Lagoon. Supporting this preliminary determination is FTA's expectation that mitigation measures will be incorporated into the project that will avoid adverse effects to the protected activities, features, and attributes of the property. Those measures will be identified through continued coordination with the MPRB, which will continue through preparation of the project's Final Section 4(f) Evaluation. The MPRB must concur in writing with the *de minimis* impact determination after the opportunity for public comment on the preliminary Section 4(f) determination."

Even if the MPRB were to concur with a *de minimis* impact determination, such concurrence would hardly be credible given MPRB's earlier official statements on the topic. For instance, in November of 2012 the MPRB clearly itemized a series of concerns with respect to the selection of the Kenilworth Corridor as the LPA and, specifically, with respect to co-location stated:

"The MPRB opposes the co-location alternative and supports the findings presented in the DEIS regarding Section 4(f) impacts for the co-location alternative. In review of the documents, the loss of parkland described for the co-location alternative *cannot be mitigated within the corridor.*" (emphasis added)

Although the MPRB ultimately entered into a Memorandum of Understanding with the Met Council providing for a consultative role in the design process (March 12, 2015) ("MOU") the MPRB has never agreed that adequate mitigation is possible. Most recently in a letter to the Met Council summarizing its most recent comments about the SDEIS, the MPRB unequivocally concluded:

"Visual quality and noise are key areas of concern for the MPRB. The introduction of LRT in combination with freight rail *poses the potential for significant disturbance* to a corridor that, once disturbed, may [not] realize a restored look for decades."

Although these Park Board statements are encouraging, the objectivity and independence of the MPRB with respect to its "consulting" role is in serious doubt, given the enormous political pressure applied by the Governor and the Met Council via real and documented threats of massive budget retaliation. The Park Board's abdication of protection of 4(f) status followed Governor Mark Dayton's threat to cut \$3 million from its budget — this in retribution for the Park Board's legitimate attempt to protect the channel. The Park Board desperately needed the funds and, to date, has acquiesced to the governor's threat, despite its belief that:

"Visual quality and noise are key areas of concern for the MPRB. The introduction of LRT in combination with freight rail poses the potential for significant disturbance to a corridor that, once disturbed, may [not] realize a restored look for decades."

#### **No-Build or Bus Rapid Transit Alternative**



Although repeated throughout the SDEIS, the following statement is representative of its treatment of 4(f) property:

“No Build Alternative and Enhanced Bus Alternative as evaluated in the Draft EIS are the only full Section 4(f) avoidance alternatives identified to date and neither of them would be prudent because they would not meet the project’s purpose and need.”

This facile and conclusory assertion is entirely inconsistent with well-understood precedent. This analysis falls short of what is required under the law. If the proposed use is not *de minimis*, then alternatives must be evaluated — presumably in good faith.

The Kenilworth Channel/Lagoon is comprised unquestionably by Section 4(f) lands and “are “...not to be lost unless there are truly unusual factors present...or...the cost of community disruption resulting from alternative routes reaches extraordinary magnitudes.” (Citizens to Preserve Overton Park v. Volpe, 401 U.S. 402 (1972))

Given the impact on 4(f) property, planners are required to evaluate alternatives – alternatives beyond the two choices proffered in the SDEIS – No Build or Bus Rapid Transit. For example there has not been a good faith determination that an adjustment to the proposed SWLRT alignment wouldn’t have the same beneficial purpose, outcome or cost as the current LPA. The law requires a deeper analysis. That such an analysis would result in a delay of the project is not sufficient justification to fail to undertake it. The following guidance from the Department of the Interior *Handbook on Departmental Review of Section 4(f) Evaluations* is instructive:

CEQ regulations, as well as DOT Section 4(f) regulations, require rigorous exploration and objective evaluation of alternative actions that would avoid all use of Section 4(f) areas and that would avoid some or all adverse environmental effects. Analysis of such alternatives, their costs, and the impacts on the 4(f) area should be included in draft NEPA documents.

It is clear that the SDEIS falls far short of this standard and that additional analysis is essential for meaningful public participation.

### **The Tunnel**

The SDEIS contains a lengthy discussion of the shallow tunnel under the Kenilworth lagoon/channel versus a tunnel with a bridge over the channel. The conclusion, not surprisingly is that there will be a non-de minimis use of the Kenilworth Lagoon/Grand Rounds property. The document promises that “all possible planning to minimize harm will be conducted and implemented . . . .”

In order to reach this conclusion the analysis first had to reject the No Build Alternative and the Enhanced Bus Alternative. The latter was rejected because it would be “inconsistent with local and regional comprehensive plans.” Again, no other avoidance options were considered.

### **Conclusion**

The Section 4(f) property identified in the SDEIS has received inadequate review and in many cases incorrect findings of *de minimis* impact. There is glaringly inadequate identification of specific mitigation and avoidance strategies and resulting outcomes as required by Section 4(f). The following statement from the Department of the Interior, which has consultative jurisdiction over this project, is clarifying:

Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable. Also not acceptable is a statement that all planning to minimize harm has been done because there is no feasible and prudent alternative. Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable. Also not acceptable is a statement that all planning to minimize harm has been done because there is no feasible and prudent alternative. *Reviewers should make sure that all possible site-specific planning has been done to identify and list the measures which will be undertaken, at project expense, to minimize harm to Section 4(f) properties. (emphasis added)*

**Addendum: Kenwood Isles Area Association**  
**Position Statement on Freight Relocation for SWLRT**

Adopted July 1, 2013

Nearly a mile of the proposed SWLRT runs through the Kenwood Isles Area Association neighborhood. **We vehemently oppose the idea of maintaining freight rail along with light rail at grade in the Kenilworth Corridor, known as “co-location.”**

Relocation of freight out of the Kenilworth Corridor has been promised for years. While the corridor was long used for transporting goods, freight use of Kenilworth was halted in 1993 when the Midtown Greenway was established. When freight was later re-introduced into the Kenilworth Corridor, Hennepin County assured residents this use of the corridor was temporary.

Meanwhile, over 20 years of citizen efforts to build and maintain Cedar Lake Park and the Kenilworth Trail have resulted in a more beautiful and complete Grand Rounds and Chain of Lakes. Traffic on federally funded commuter and recreational bicycle trails in the Kenilworth Corridor grew to at least 620,000, perhaps approaching one million, visits in 2012.

When the Hennepin County Regional Railroad Authority began looking at using the Kenilworth Corridor for LRT, several key studies and decisions reiterated the expectation that if Kenilworth is to be used for transit, then the freight line must be relocated. (See notes below.) Trails were to be preserved. Freight rail was to be considered a separate project with a separate funding stream, according to Hennepin County. This position was stated publicly on many occasions, including Community Advisory Committee meetings and Policy Advisory Committee meetings.

Minneapolis residents have positively contributed to the SWLRT process based on the information that freight and light rail would not co-exist in the Kenilworth Corridor. Although many of us think that Kenilworth is not the best route, most have participated in the spirit of cooperation and compromise to make the SWLRT the best it can be.

Despite numerous engineering studies on rerouting the freight rail, it was not until December 2012 that the current freight operator in the Kenilworth Corridor, TC&W, decided to weigh in publicly on the location of its freight rail route. TC&W rejected the proposed reroute.

The Met Council has responded by advancing new proposals for both rerouting the freight and keeping it in the Kenilworth Corridor. For either option, these proposals range from the hugely impactful to the very expensive – or both. Six of the eight proposals call for “co-location” despite the temporary status of freight in Kenilworth. The Kenilworth proposals include the destruction of homes, trails, parkland, and green space. Most of the proposals would significantly add to the noise, safety issues, visual impacts, traffic backups, and other environmental impacts identified in the DEIS.

This is not a NIMBY issue. The Kenilworth Trail provides safe, healthy recreational and commuter options for the city and region. It is functionally part of our park system. The Kenilworth Corridor is priceless green space that cannot be replaced.

For over a decade public agencies have stated that freight rail must be relocated to make way for LRT through the Kenilworth Corridor. If this position were reversed midway through the design process for SWLRT, the residents of Kenwood Isles would find this a significant breach of the public trust.

Simply stated, none of the co-location proposals are in keeping with the project goals of preserving the environment, protecting the quality of life, and creating a safe transit mode compatible with existing trails.

This has been a deeply flawed process, and we **reject any recommendation for at-grade co-location in the Kenilworth Corridor. If freight doesn’t work in St. Louis Park, perhaps it’s time to rethink the Locally Preferred Alternative.**

### Notes

1) The 29<sup>th</sup> Street and Southwest Corridor Vintage Trolley Study (2000) noted that, “To implement transit service in the Southwest Corridor, either a rail swap with Canadian Pacific Rail or a southern interconnect must occur.”

2) The FTA-compliant Alternatives Analysis (2005-2007) defines the Kenilworth section of route 3A for the proposed Southwest Light Rail in this way: “Just north of West Lake Street the route enters **an exclusive (LRT) guideway in the HCRRA’s Kenilworth Corridor to Penn Avenue**” (page 25). This study goes on to say that “to construct and operate an exclusive transit-only guideway in the HCRRA’s Kenilworth Corridor the **existing freight rail service must be relocated**” (page 26).

3) The “Locally Preferred Alternative” (LPA) recommended by HCRRA (10/29/2009) to participating municipalities and the Metropolitan Council included a recommendation that freight rail relocation be considered as a separate “parallel process.”

4) In adopting HCRRA’s recommended Locally Preferred Alternative based on treating relocation of the freight rail as a separate process, the City of Minneapolis’ Resolution (January 2010) stated:

**“Be It Further Resolved that the current environmental quality, natural conditions, wildlife, urban forest, and the walking and biking paths be preserved and protected during construction and operation of the proposed Southwest LRT line.**

Be It Further Resolved that any negative impacts to the parks and park-like surrounding areas resulting from the Southwest LRT line are minimized and that access to Cedar Lake Park, Cedar Lake Regional Trail, Kenilworth Trail and the Midtown Greenway is retained.”

5) The Draft Environmental Impact Statement supports the Locally Preferred Alternative, which includes relocation of freight out of the Kenilworth Corridor. (December 2012)

6) The [southwesttransitway.org](http://southwesttransitway.org) has stated since its inception that:

Hennepin County and its partners are committed to ensuring that a connected system of trails is retained throughout the southwest metro area. Currently, there are four trails that may be affected by a Southwest LRT line. They are the Southwest LRT trail, the Kenilworth trail, the Cedar Lake Park trail, and the Midtown Greenway. These trails are all located on property owned by the HCRRA. The existing walking and biking trails will be maintained; **there is plenty of**

**space for light rail and the existing trails.** Currently, rails and trails safely coexist in more than 60 areas of the United States.

## **LRT Done Right Addendum on previous communication concerning freight and safety**

Date: September 30, 2014

To: Pipeline and Hazardous Materials Safety Administration and Federal Railroad Administration

From: LRT-Done Right

Re: **Docket No. PHMSA-2012-0082 (HM-251) – Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains**

### **INTRODUCTION AND BACKGROUND**

LRT-Done Right is a grass roots organization that has done much research and advocacy regarding the effects of light rail transit and freight lines on community well being. Limited resources typically prevent community organizations from having the same access to federal regulators that industry representatives do. This opportunity to contribute a meaningful comment is greatly appreciated, as is the Pipeline and Hazardous Materials Safety Administration's (PHMSA) earnest consideration of our comments.

It is noted that relative to the importance of the PHMSA standards, very few parties comment on these proposed rules. At the time of this submission, elected officials have not submitted a comment on behalf of the interest/protection of Minneapolis/St Paul or generally on behalf of Minnesota (i.e. mayor, city council, state legislators, Governor, etc.) and only a few federal politicians have made comment. This is concerning because communities rely on elected officials to serve the best interest of the community residents. Most comments, related to Docket No. PHMSA-2012-0082 (HM251), were generated by individual citizens, small communities or cities, or by industry representatives. As citizens, we have expended great care and effort to learn about the issues of freight safety, and have had to do it quickly.

The large-scale shipment of crude oil and ethanol by rail simply didn't exist ten years ago, and safety regulations need to catch up with this new reality. While this energy boom is good for business, the people and the environment along rail corridors must be protected from harm. Crude oil shipments by rail have increased by over 40-fold since 2005, according to the Association of American Railroad's Annual Report of Hazardous Materials. In fact, more crude oil was transported by rail in North America in 2013 than in the past five years combined, most of it extracted from the Bakken shale of North Dakota and Montana (Stockman).

The National Transportation Safety Board (NTSB) noted their concern to PHMSA, that major loss of life, property damage and environmental consequences can occur when large volumes of crude oil or other flammable liquids are transported on a single train involved in an incident, as seen in the Lac Megantic, Quebec, disaster, as well as several disasters that the NTSB has investigated in the United States. The NTSB recommendations to the Federal Railroad Administration and the Pipeline and Hazardous Materials Safety Administration include reroutes of trains carrying hazardous cargo around populated and environmental sensitive corridors, development of an

audit program to ensure rail carriers that carry petroleum products have adequate response capabilities to address worst-case discharges of the entire quantity of product carried on a train and an audit of shippers and rail carriers to ensure that they are properly classifying hazardous materials in transportation and that they have adequate safety and security plans in place (NTSB).

## **RULE ANALYSIS**

LRT-Done Right commends PHMSA and FRA for the effort to improve rail safety with the development of this proposed rule. While understanding the need to balance community safety with the needs of railroads as a profitable enterprise, there are several omissions in the proposed standards that we wish to address. It is clear that PHMSA standards for too long have been overly influenced by industry (Straw R), but as recent rail disasters have shown, the necessity to protect the public's interest is imperative. Because we are citizens with limited rail engineering expertise, we will use our own experiences with a small short line railroad called Twin City & Western (TC&W) to illustrate issues with PHMSA standards. TC&W is a Class III railroad with connections to Canadian Pacific, Union Pacific, Burlington Northern and Canadian National. Under current PHMSA guidelines, which apply to Class I railroads, these enhanced tank car standards and operational controls for High-Hazard Flammable Trains (HHFT) would not apply. This is gravely concerning. Our comments will cover issues of rail routing, notification to State Emergency Response Commissions, tank car specifications, and additional requirements for HHFTs.

### **Rail Routing -**

Missing from standards are guidelines on construction of new transit lines in an active freight rail corridors. Increasingly, light rail transit (LRT) through suburban and urban areas is being run through established freight corridors, which were designed in a different era of rail safety (Sela, et al). LRT routes are planned by local and regional public officials who typically are not adequately addressing the safety of these transit routes, leaving it to affected neighborhoods to advocate for community safety. The trend toward locating LRT adjacent to freight must be addressed in these PHMSA standards. We understand this to be complicated by issues of governance; the Federal Railroad Administration (FRA) regulates freight trains while the Federal Transit Administration (FTA) guides LRT lines. However FRA has ultimate authority and PHMSA writes rules for safety. This particular comment regarding rail routing may be currently beyond the purview of these particular proposed PHMSA standards, never the less we submit these comments to stress their importance to freight safety in shared use corridors, and for immediate consideration and inclusion in this joint PHMSA and FRA rule.

Shared FRA/FTA guidelines are written with respect to Amtrak, and give responsibility to the freight companies for managing shared track (Federal Register, Part VII). Currently, there are no specific safety requirements for either existing or yet to be constructed commuter lines in shared corridors, where track is not shared (Resor R). When track is shared, then commuter lines must meet strict safety guidelines, but when track-separated right of way (ROW) is shared, there are no regulations whatsoever, and localities must police themselves. No guidelines exist that guide either the construction phase of adding LRT lines through an existing freight corridor, or corridor minimum level safety standards. Hence, there are many co-location projects nationwide moving forward, which do not meet minimum American Railroad Engineering and Maintenance-of-way Association (AREMA) guidelines. AREMA guidelines recommend minimum standards for grade separation of 25 feet center rail to center rail. The Rail Safety Improvement Act of 1988 gives the FRA jurisdiction over most types of railroad including shared track LRT (Pub. L. No 100-342), however the FRA has historically not chosen to exercise this authority. This has left shared ROW LRT in a netherworld of un-regulation, which we believe seriously compromises the safety of people, property and environment along these types of corridors.

A case in point is Southwest Light Rail Transit (SWLRT), currently in the early engineering phase and being

considered for construction by the FTA through the Kenilworth corridor in the Minneapolis, MN area. If constructed, LRT will run less than 12 feet from freight rail at a point along the Kenilworth Corridor that regularly carries Class 3 flammable liquids, including long unit trains of ethanol. During the construction phase of a proposed tunnel in an area that can not accommodate both LRT, a freight line, and an existing heavily used bike trail, the freight line, which will continue full service throughout the construction will run just 11 feet from a 35 foot construction pit in an populated area of Minneapolis. In no other instance, could we find current plans to co-locate LRT next to a freight rail line that carries Class 3 flammable liquids. There are other lines that exist where co-location occurs, but these were built many years ago prior to the awareness of the danger existent with oil and ethanol trains. The TC&W freight regularly runs unit trains of 60-100 ethanol train cars through the Kenilworth corridor within feet of the proposed LRT line. Ethanol is highly combustible, which may form explosive mixtures with air and where exposure to electrostatic charges should be avoided (ODN). Yet these electrified LRT lines will literally be next to tanker cars carrying ethanol and other chemicals.

Over the 20-year interval from 1993 to 2012, there were 1,631 mainline passenger train disasters, including 886 grade crossing accidents, 395 obstruction accidents, 263 derailments, 71 collisions. During the same time period, there were 13,563 freight derailments and 851 collisions (Lin et al). Derailments and collisions were identified as the most potentially significant train accident types while human factors accidents and track failures, including obstructions were the primary causes of those accidents (Lin et al). Adjacent tracks, occupied by freight and passenger rail - refers to train disaster scenarios where derailed equipment intrudes adjacent tracks, causing operational disturbance and potential subsequent train collisions on the adjacent tracks (Lin and Saat). Lin and Saat created probability models assessing risk along adjacent tracks to determine risk and severity of a crash leading to a collision or derailment. Identified risk factors included distance between track centers, train speeds, train densities, different train control systems, and level of hazardous train cargo. In the case of SWLRT, this model assessed Kenilworth to be a high-risk rail corridor, yet due to a lack of regulation of co-location, this project progresses.

For transit located on adjacent track to active freight, FRA's concern is that operations of a freight railroad in close proximity to LRT could present safety risks for both. In considering our SWLRT case study, track centers distances are as narrow as 12 feet (11 feet during construction), with 220 LRT trains proposed daily. A derailment of either freight or LRT could be disastrous. With distances of 11-12 feet between SWLRT and freight, if either were to encroach and cause intrusion upon the other, this would likely bring death and destruction, and depending upon the cargo carried, could mean broad evacuation of 1000s of area residents. AREMA's 25 foot standard would be more likely to prevent intrusion onto the adjacent track, and would keep electrified lines away from highly flammable fuel carrying tankers.

None of this accounts for issues related to trains as targets of terrorism or using those trains for terrorist purposes (Brodsky), using chemicals such as chlorine or fossil fuels to create 'bomb trains' or mayhem. Minneapolis is a high threat urban area as determined by the Transportation Safety Administration (TSA); our case study SWLRT parallels freight up to and past the Target Center and the Twins Stadium, two large venues for sports and entertainment. This is another scenario that begs for a solution that would set safety rules for co-location of freight and passenger rail through shared ROW near sites at high risk for terrorism.

The safety requirements for HHFT should apply to Class I, Class II, and Class III railroads. There are short line railroads that are shipping ethanol, and due to common carrier obligations, may be called upon to ship oil, chlorine or other Class 3 flammable liquids. Due to entity size and revenues, these short line railroads typically are Class III railroads. The revenue generating capacity of a railroad should not govern the safety standards to which it is held. If a railroad or shipper does not have the capacity to adhere to the HHFT tank car standards and operational controls, it is dangerous for that entity to be in the business of conveying Class 3 flammable liquids. The relevance of these standards only to Class I railroads, to trains of 20 or more rail cars of hazardous cargo, and to only population areas of 100,00 or more, leave many communities endangered. The safety requirements for HHFT should apply to Class I, Class II, and Class III railroads. The revenue generating capacity of a railroad should not govern the safety standards to which it is held. If a railroad or shipper does not have the capacity to adhere to the HHFT tank car standards and operational controls, it is dangerous for that entity to be in the business of

conveying Class 3 flammable liquids. Additionally, the absence of regulation guiding construction of adjacent rail lines through shared ROW carrying tanker chemicals pose danger to residents along these corridors. Regulatory action must be more broadly addressed to all railroads, on any trains carrying any hazardous materials through any community of any population size.

PHMSA standards are proposed only for communities with population greater than 100,000. We understand the necessity of setting population density standards, but suggest that the threshold of 100,000 is too high. It is discriminatory to penalize a small community and to put them at greater risk due to safe guards not being applicable. Further, it is those communities that would be least likely to absorb the cost of disaster. Railroads must be accountable for safety and exercise due diligence for one tank car or 100 tank cars, in urban and on rural routes. Many of the rail disasters that have occurred happened in areas where populations were less than 100,000 (e.g. Lac Megantic). These communities deserve to be protected too.

#### **Notification to State Emergency Response Commissions (SERCs)-**

The proposed PHMSA rule would require notification to SERCs only if trains containing one million gallons of Bakken crude are operating in their States. The requirement ignores the dangers ethanol and does not acknowledge that as little as one carload of oil or ethanol can trigger disaster, as is evidenced by the summary of selected major oil and ethanol train disasters shown in Table 3 provided in the Docket No. PHMSA-2012-0082 (HM-251).

Ethanol is a Class 3 flammable liquid and is considered as dangerous as oil by the National Transportation Safety Board. Ethanol is appropriately classified as a Class 3 flammable and should not be referred to simply as an agricultural product. Ethanol is caustic to the skin, harmful if breathed, highly flammable and very difficult to clean up especially if released in bodies of water. The reason for this clean up challenge is that ethanol is soluble in water. Unlike petroleum, which can be extracted from the top of the water, concentrated ethanol would require full liquid removal (i.e., in the event of an ethanol spill in a lake, the affected would need to be drained). In groundwater, ethanol does not respond to typical remediation techniques, like air stripping and filtration.

To achieve the best protection for our communities, emergency responders and railroad workers – SERCs must have advance notice that oil and ethanol is being shipped through their states. Further all railroads/shippers of oil or ethanol must design and implement a comprehensive spill response plans. These response plans must be provided in advance to the relevant SERCs, Tribal Emergency Response Commissions, Fusion Centers and any other State designated agencies.

These safety preparedness requirements must apply to all railroads/shippers of Class 3 flammable liquids, regardless of their classification (i.e., Class I, Class II or Class III). Without this requirement there will not be adequate training and incentive to minimize collateral damage to communities.

If a railroad or shipper does not have the manpower and fiscal capacity to develop and execute a Class 3 flammable liquid spill response plan, it is not prudent for that entity to be in the business of conveying Class 3 flammable liquids. Spill response plans should take in to account the terrain, natural geography and municipal development along the route used for transport. Specifically if lakes and rivers are present, the plan must provide for containment to prevent water contamination and plan for the de-contamination of bodies of water. Additionally the presence of other freight and/or public transit modes in the same ROW corridor, along with the proximity to residential and school areas, must be addressed in developing the appropriate spill response plan.

#### **Tank Car Specifications -**

PHMSA recognizes that DOT-111 tank cars can almost always be expected to breach in the event of a train crash and resulting in spills, explosions and destruction, yet the proposed new rule on train operation and tank car

design would fail to take a single DOT-111 car off the rails. New designs for DOT-111s include increased minimum head and shell thickness, top and bottom fitting protection, a thicker head shield, and head and shells constructed of normalized steel. The guidelines recommend that new DOT-111s ordered after October 1, 2011, be built to this standard. We appreciate these new standards. However, the type of crude involved in the Lac Megantic disaster could be carried on the least safe DOT-111 tank cars until Oct. 1, 2018. An immediate ban on shipping volatile crude and ethanol in the DOT-111 tank cars is in order.

Short line railroads like TC&W in Minnesota are small and often unable or unwilling to purchase these new tanker cars because their ability to invest capital in new cars is limited. They instead tend to purchase used tanker cars from other larger railroads that are retiring those for newer tank cars, and they retrofit older used cars to meet minimum safety standards. It is ironic that these short line railroads which are often run through heavily populated urban corridors have the worst quality tank cars in all the fleets, yet run through the most densely populated corridors. Of the 94,178 cars in flammable service, currently only 14,150, or 5 percent of the total DOT-111 fleet (15 percent of the flammable service fleet), have been manufactured to comply with new standards (Pumphrey et al).

Additionally, as the amount of oil being shipped by rail has increased, train companies have moved to using unit trains for shipping higher volumes (Pumphrey et al). Unlike a manifest train, which might carry a variety of different commodities, a unit train carries only one commodity (e.g., ethanol or crude oil). Unit trains consist of between 50 and 120 tank cars, the equivalent of 50,000 to 90,000 barrels of oil, becoming a "virtual pipeline" or a potential bomb train. Unit trains may increase efficiency but also increase risk. According to the American Association of

Railroads (AAR), "a single large unit train might carry 85,000 barrels of oil". There is no publicly available data on how much oil or ethanol is being shipped in unit trains versus non-unit trains (Pumphreys et al). Shippers of crude oil currently are not required to prepare a comprehensive oil spill response plan (OSRP). Shippers should be required to report even one tanker car of oil or ethanol. And limits should be placed on the number of tanker cars in any single train, especially through high population density areas.

In the case of SWLRT, nearly all ethanol trains that run on the freight track are unit trains. Substandard tank cars combined with the fact of unit trains and a high number of tanker cars means that the Kenilworth Corridor is at high risk. The proximity of an electrified LRT a mere 12 feet from tanker cars could mean that this neighborhood could become ground zero in case of derailment.

The next generation tank cars should exceed the previous 2011 standards, and that should be phased in at a quicker pace than proposed. It is clear that rail company lobbyists are actively trying to minimize PHMSA regulatory tanker car standards (Straw). You must steal your resolve and demand improvements for public safety, and for short line railroads demand similar standards with no waivers.

Small short line railroads are often not given the attention or training of larger railroads, yet they often utilize the worst tanker cars and have the least emergency training. Short Line Railroad Safety training for short line railroads transporting crude and ethanol must be a greater priority, because they often run through high-density urban corridors.

#### **Additional Requirements for High-Hazard Flammable Trains (HHFTs)-**

The proposed rule defines a HHFT as a single train carrying 20 or more carloads of Class 3 flammable liquid. The definition does not serve the safety interests of the United States. It is documented that one carload of Class 3 flammable liquid can trigger a disaster and devastation. For that reason, a HHFT should mean a single train carrying one or more carloads of Class 3 flammable liquids.

Further the proposed rule applies only to trains operated by Class I railroads. The PHMSA and FRA safety rules related to Class 3 flammable liquids should be in effect for all railroads/shippers that convey Class 3 flammable



liquids. The class (i.e., Class I, II or III) of a railroad is determined by its revenue generation. It is not reasonable to exempt a railroad from important safety requirements based on its revenue generating capacity. If a railroad/shipper does not have the capacity to adhere to relevant HHFT and Class 3 flammable liquid safety standards, it is not prudent for that entity to be in the business of conveying Class 3 flammable liquids. These important safety rules must apply to all classes of railroads, otherwise there are opportunities to circumvent necessary precautions and responsibilities.

Further the proposed rule does not address the liability insurance requirements for railroads/shippers of Class 3 flammable liquids. This is a complicated topic especially when the condition of a share ROW exists. Goals of insurance requirement should address:

1. Allocating the liability from risks between the freight railroad and the transit agency
2. Managing the additional risk by developing a prudent insurance strategy
3. Ensuring the safety of passengers in mixed freight and transit operations
4. The willingness of freight railroads to grant access to their ROW for transit operations
5. Providing satisfactory conditions for continuing service to freight customers. Without adequate insurance requirements, the public will be exposed to uncompensated losses when freight and transit disasters occur.

## RECOMMENDATIONS

These proposed PHMSA rules are a beginning toward building a safer rail industry. However, the more we investigated the rules, the clearer it became that the rules do not go far enough to protect the public. The current standards are remarkable more for what they do not regulate than for what they do. Much more needs to be done to ensure public and environmental safety. We recommend that PHMSA immediately incorporate the recommendations listed below to expand this rule on safety standards to better protect the public and the environment:

1. Modify the definition of a high-hazard flammable train provided in Section 171.8 to read as follows: High hazard flammable train means a single train carrying 1 or more carloads of a Class 3 flammable liquid.
2. The PHMSA and FRA rules must apply to all trains conveying Class 3 flammable liquid regardless of railroad classification (i.e., includes Class I, Class II and Class III railroads). This would extend PHMSA regulatory actions to all railroads regardless of Class.
3. The PHMSA and FRA safety rules should apply equally to HHFTs that are conveying oil and/or ethanol. The NTSB views ethanol as dangerous as oil. Having safety rules that address the conveyance of oil but do not apply to ethanol carriers is flawed, as both are Class 3 flammable liquids.
4. Ban the use of DOT-111 tank cars now for transporting any amount of hazardous materials, instead of focusing solely on trains with more than 20 railcars of crude oil. The proposal to allow continued use of DOT-111 cars on trains of fewer than 20 cars would fail to protect public safety and the environment.
5. DOT-111 cars should not be used for the transport of any crude oils or fossil fuels, regardless of classification.
6. Retrofitted cars that fail to meet every standard of the most protective new tank car design should be barred from use for all shipments of hazardous materials, regardless of class and have regular safety

inspections to assess their continued safety.

7. Require that any and all railroads/shippers conveying one car load or more of Class 3 flammable liquids are required to notify SERCs about the operation of these trains through their States. Further it is recommended that comprehensive spill response plans be submitted for review and approval by relevant federal agencies under the National Contingency Plan, along with PHMSA. Given the relatively few number of railroad entities, it is not anticipated for this to be an undue burden. To minimize risks due to outdated comprehensive spill response plans, it is strongly recommended that plans be updated at least on a 3-year cycle and whenever there is a change of ownership in the railroad or shipper.
8. Enforcement of PHMSA/FRA/FRA rules and inspections do not happen regularly due to minimal federal staffing. An increase in the frequency of inspections is recommended, with funding provided by railroad fees.
9. Implement federal standards and rules that would minimize the occurrence of the key causes of train derailments resulting in spills; namely, the size of trains, state of infrastructure and human error. The proposed rule enumerates the most common causes of hazardous train derailments but fails to propose meaningful solutions such as limits on the number of cars permitted in each train, the use of unit trains, requirements for new build outs in shared row, infrastructure and inspection improvements, and management and oversight.
10. Derailments and spills can happen everywhere. Instead of selectively protecting only the most densely populated cities, apply these standards everywhere. As written, the proposed rules are designed to reduce risk to communities of greater than 100,000 people, but protections should be afforded all communities. These standards specifically acknowledge that it is putting people at risk solely because of where they live. This is immoral.
11. Sensitive environments including but not limited to areas near water, drinking water supplies, parks and animal habitat should be protected by all available safety standards.
12. Require full public disclosure to first responders of all hazardous rail shipments. There should be no exemptions for trains with fewer than 35 cars. Even one car of hazardous cargo should be disclosed so that emergency responders can act appropriately in the case of a disaster.
13. Uniform federal level guidelines should be developed to guide all future construction and management of LRT/commuter rail lines in shared freight/transit corridors, in particular along corridors that carry Class 3 flammable liquids.
14. A comprehensive study of derailment probability in shared ROW should be undertaken to understand the effect of track spacing, electrification of LRT adjacent to gas/oil/ethanol bearing trains, train speeds, train cargo, and train ownership (long range vs. short line railroads).
15. Minimum standards should be set for co-location of passenger and freight co-location, including that ROW should meet the AREMA minimum safety standard of 25 feet center rail to center rail (Caughron B et al). Immediately institute a moratorium on the building of LRT lines adjacent to freight lines that are conveying any amount of Class 3 flammable liquids in corridors that do not meet AREMA's 25 feet center rail to center rail standard.
16. All trains conveying Class 3 flammable liquids should be re-routed outside of high risk urban areas and away from areas at high risk for derailment or terrorism including urban neighborhoods, downtown areas, malls and major sports and entertainment complexes.

## CONCLUSION

Given the exponential increase in shipments of oil and ethanol, the need to upgrade and implement relevant freight rail safety standards is urgent and necessary to the well being of our communities and environment. The coordination of oversight authority for all railroads (i.e., Class I -III) and public transit projects safety must also

improve. The proposed rule along with the aforementioned recommendations will serve to protect our nation and place the responsibility for safety precautions with the appropriate entities and not place undue burden on communities and residents.

## SOURCES

Brodsky B. Industrial Chemicals as Weapons: Chlorine. NTI: Building a Safer World. <http://www.nti.org/analysis/articles/industrial-chemicals-weapons-chlorine/>.

Caughron B, Saat MR, Barkan C. Identifying and Prioritizing Shared Rail Corridor Technical Challenges. AREMA Conference 2012. <http://railtec.illinois.edu/CEE/pdf/Conference%20Proceedings/2012/Caughron%20et%20al%202012.pdf>

Federal Register, Part VII, 49 CFR Parts 209 and 211.

Lin CY, Saat M, Barkan C. Causal Analysis of Passenger Train Accident on Shared-Use Rail Corridors. Transportation Research Board 93rd Annual Meeting. Nov 2013. <http://assets.conferencespot.org/files/server/file/64876/filename/14-2181.pdf>.

Lin CY, Saat, M. Semi-quantitative Risk Assessment of Adjacent Track Accidents on Shared-Use Rail Corridors. April 2014. Proceedings of the 2014 Joint Rail Conference JRC2014. <http://railtec.illinois.edu/articles/Files/Conference%20Proceedings/2014/JRC2014-3773.pdf>.

ODN. Online Distillery Network. Ethanol Materials Data Safety Sheet. <http://www.distill.com/materialsafety/msds-eu.html>.

NTSB. NTSB calls for tougher standards on trains carrying crude oil. Press Release. Jan 23, 2014. <http://www.nts.gov/news/2014/140123.html>.

Pumphrey D, Hyland L, Melton M. Safety of Crude Oil by Rail. March 2014. Center for Strategic and International Studies. [http://csis.org/files/publication/140306\\_Pumphrey\\_SafetyCrudeOilRail\\_Web.pdf](http://csis.org/files/publication/140306_Pumphrey_SafetyCrudeOilRail_Web.pdf).

Resor R. Catalogue of Common Use Corridors. USDOT/FRA/ORD03/16. April 2003

Sela E, Resor R, Hickley T. Shared Use Corridors Survey of Practice and Recommendations for the Future. Crossing and Shared Corridors. [www.onlinepubs.trb.org/onlinepubs/circulars/ec058/08/\\_04\\_sela.pdf](http://www.onlinepubs.trb.org/onlinepubs/circulars/ec058/08/_04_sela.pdf).

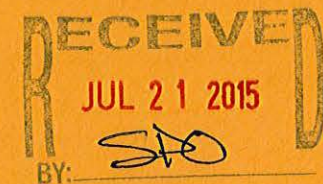
Straw R. White House Agency Under Pressure From Big Oil & Rail – Accused of "Coddling" the Industries. The Benecia Independent. June 2014. <http://beneciaindependent.com/white-house-agency-under-pressure-from-big-oil-rail-accused-of-coddling-the-industries/>.

TSA. Part 1580. Appendix A. <http://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol9/pdf/CFR-2011-title49-vol9-part1580-appA.pdf>.



LRT Done Right  
2782 Dean Parkway  
Minneapolis, MN 55416

Nani Jacobson  
Assistant Director, Environmental + Agreements  
Metro Transit - SW LRT Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426





From: [amy.sheldon](#)  
To: [swlrt](#)  
Cc: [Amy Sheldon](#)  
Subject: Objections to SWLRT plan. Support of the SDEIS response document from LRT-Done Right.  
Date: Tuesday, July 21, 2015 3:02:57 PM

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To:  
Nani Jacobson  
Assistant Director, Environmental and Agreements  
Metro Transit - Southwest LRT Project office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

I write to add my whole-hearted support of the SDEIS response document to the current SWLRT plan that was submitted by Mary Pattock on behalf of the LRT-Done Right organization on July 21, 2015.

A comprehensive and sobering set of environmental and other objections to the co-location route through the Kenilworth corridor have been carefully documented in that letter and are beyond question.

Therefore, please give this well-research document your careful consideration. The environmental impact of the current SWLRT has not been sufficiently thought through. We have not reached convincing, sustainable and effective solutions to real potential environmental damage and runaway financial costs due to poor (inappropriate) location of the SWLRT in the Kenilworth corridor. The hidden costs and environmental dangers of co-location on this particular route will be far greater than acknowledged, into the foreseeable future. The ridership will be lower than projected because of the existence of Southwest transit buses that already meet the need for faster, wi-fi enabled, commuter service into Minneapolis. The expected jobs have not materialized, so we do not know what parts of the local population will benefit or if jobs will materialize in proportion to the expense of LRT. There are numerous other objections to the current SWLRT plan that make a convincing case that it is premature, environmentally hazardous, too costly, and in the end, an ineffective pipe dream.

It is, frankly, an embarrassment to the reputation of the Twin Cities that the *possibility* (not even guarantee) of federal money is driving the decision to go with a plan with such clear dangers and unsolved problems. This is poor, short-sighted public policy.

Instead, let's take time to thoroughly and convincingly compare the benefits of safer, more equitable locations for a SWLRT route. Let's make a better decision for the future of people and neighborhoods that will really benefit from a light rail extension, without the current heavy, unnecessary, and rueful environmental cost.

We want light rail, but not at these costs. Please do not support the Kenilworth route for SWLRT; consider better alternatives, such as the Brunswick route.

Sincerely,  
Amy Sheldon  
Bryn Mawr resident, citizen, tax payer, voter, grandparent, educator.

**From:** [bryceham](#)  
**To:** [swlrt](#)  
**Subject:** Proposed SWLRT  
**Date:** Tuesday, July 21, 2015 4:23:18 PM

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Friends---

We strongly endorse the comments and extensive research on the proposed Southwest Light Rail system done by LRT-Done Right. Please take all elements of their report into serious consideration.

Thank you,

Bryce and Donna Hamilton  
4033 Linden Hills Blvd  
Mpls MN 554120

**From:** [Patricia Benn](#)  
**To:** [swlrt](#)  
**Subject:** questions about route  
**Date:** Tuesday, July 21, 2015 4:37:31 PM

---

Dear Nani Jacobson, SWLRTProject Office,

As you are taking public comments on the project, I would like to know why the route does not follow Highway 100 from a Beltline Station to downtown, thereby serving a lot of new high density housing at 36th St. & 100 and a vibrant business and housing area at 100 & 394. From there the route might follow the rail line into Minneapolis, although there may be the same environmental difficulty between Cedar and Brownie Lakes.

I protest strongly the co-location of freight and light rail by Cedar Lake on the Kenilworth Trail. I understood the use of the rail bed there if the freight line had been relocated as promised. It would have been an improvement for the neighborhood, in my opinion. However for serving more population it did not make sense. To run somewhere between Lake St and Lyndale to serve more high density population seemed to be ruled out because of the cost. The present plan has a higher cost of serious environmental impact and should be ruled out for that reason.

Sincerely,

Patricia Benn  
pebenn@comcast.net

612-377-5695 Minneapolis

**From:** [Sally Rousse](#)  
**To:** [swlrt](#)  
**Subject:** SDEIS comments  
**Date:** Tuesday, July 21, 2015 2:11:27 PM  
**Attachments:** [LRT Done Right SDEIS Response .docx](#)

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Attached please find my comments to the SDEIS.

Sally Rousse  
 620 Oliver Avenue South  
 Minneapolis, MN 55405

July 21, 2015

Nani Jacobson  
 Assistant Director, Environmental and Agreements  
 Metro Transit — Southwest LRT Project Office  
 6465 Wayzata Blvd, Suite 500  
 St. Louis Park, MN 55426

Dear Ms. Jacobson:

I am a Bryn Mawr resident, living within the “Blast Zone” of freight along the Cedar Lake Trail and Junction and the proposed SWLRT route. I have been following the SWLRT project for over 13 years, having first lived on Burham Road, also near freight. I have attended almost all of the public and community forums for this project. I have also lived the other half of my 51 year life in NYC, Chicago and Europe where mass transit is of course present. I support mass transit for Minneapolis but not this plan. I expect the Met Council to be respectful and accountable for my comments and others that they receive.

The 2012 Draft Environmental Impact Statement clearly recommended that the best course of action was to relocate freight out of the Kenilworth Corridor.

This position was reversed in 2013, and the Metropolitan Council’s recommendation is now to “co-locate” freight and light rail in the Kenilworth Corridor. We consider this a significant breach of public trust and the low point of a deeply flawed planning process. We are an organization that seeks to represent concerns of those most impacted by this unfortunate decision.

The current Supplementary Draft Environmental Impact Statement is partly intended to assess the impact of co-location in the Kenilworth Corridor. It fails to do so on many levels, summarized in the following points:

First, it considers the *temporary* freight rail part of the existing condition. Freight rail service that runs through the corridor would be both upgraded and made permanent; this is a *new* project that needs a full analysis. Because new *permanent* freight infrastructure is being added to the corridor, all visual, noise, vibration, safety and other environmental impacts should be measured *from a basis of no freight and no light rail*.

Second, this SDEIS is silent on the safety implications of locating freight trains carrying hazardous materials through an urban environment within feet of homes, parks, trails, passenger trains, and live overhead electrical wires. The new and serious impacts created by this situation would continue to grow as transport of ethanol and other volatile materials expands and freight trains grow longer.

Third, this SDEIS is significantly flawed in its findings regarding environmental impact, safety concerns, and disturbance of livability, if not outright danger, to those living within a half mile of the route, which we will refer to as the “Blast Zone.” This is a real issue that was not as prevalent in the news when the alignment was first proposed. In the context of current discussions regarding the increased number of freight accidents across the United States and Minnesota, we are seriously concerned about the safety of families and loved ones who would live in a Blast Zone zone surrounding ethanol trains and sparking LRT wires.

Fourth, we are disturbed by the promises of unspecified remediation activities found throughout the SDEIS. As the Department of the Interior says in its *Handbook on Departmental Review of Section 4(f) Evaluations*: “Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable.... Reviewers should make sure that all possible site-specific planning has been done to identify and list the measures which will be undertaken, at project expense, to minimize harm to Section 4(f) properties.” Such general promises are not acceptable to the federal government. Nor are they acceptable to us.

Finally, the SDEIS fails to address the significant costs associated with the many design and construction, safety, and environmental remedies that it will, based on our assessment, be required to implement — the relocation of a sewer force main that the Met Council installed only months ago, and sound and vibration remediation measures for area residents are but two. Nor does it recognize long-term costs of lost property tax revenue that would erode the tax base of the City of Minneapolis in perpetuity. We estimate that these combined costs would initially total at least \$13 million to \$24 million, and much more over the years.

When Hennepin County and the Met Council chose the present route for SWLRT between the Chain of Lakes through the Kenilworth Corridor — including “co-location,” thus making the temporary freight rail permanent — they accepted the responsibility to respect the natural and built environments that it travels through as well as the people who bicycle, walk, recreate, and live there. LRTDR does not see evidence that this responsibility has been taken as seriously as necessary and the following pages, which respond to specific elements of the SDEIS, articulate some of the reasons why.

Sally Rousse  
[sallyrousse@gmail.com](mailto:sallyrousse@gmail.com)



# LRT-Done Right

2782 Dean Parkway  
Minneapolis, MN 55416

July 21, 2015

Nani Jacobson  
Assistant Director, Environmental and Agreements  
Metro Transit — Southwest LRT Project Office  
6465 Wayzata Blvd, Suite 500  
St. Louis Park, MN 55426

Dear Ms. Jacobson:

LRT-Done Right is a grassroots organization of some 500 Minneapolis residents and taxpayers who have conducted exhaustive research and advocacy on the effects of light rail transit and freight lines on community well being. We hereby submit to you our comments on the Southwest LRT Supplemental Draft EIS. They are the product of literally thousands of volunteer hours of research, analysis, and writing. As citizens of Minneapolis and the Metro area, we hope and expect that they will receive appropriate respect, attention, and response.

The 2012 Draft Environmental Impact Statement clearly recommended that the best course of action was to relocate freight out of the Kenilworth Corridor.

This position was reversed in 2013, and the Metropolitan Council's recommendation is now to "co-locate" freight and light rail in the Kenilworth Corridor. We consider this a significant breach of public trust and the low point of a deeply flawed planning process. We are an organization that seeks to represent concerns of those most impacted by this unfortunate decision.

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When Hennepin County and the Met Council chose the present route for SWLRT between the Chain of Lakes through the Kenilworth Corridor — including "co-location," thus making the temporary freight rail permanent — they accepted the responsibility to respect the natural and built environments that it travels through as well as the people who bicycle, walk, recreate, and live there. LRTDR does not see evidence that this responsibility has been taken as seriously as necessary and the following pages, which respond to specific elements of the SDEIS, articulate some of the reasons why.

Mary Pattock  
On behalf of LRT-Done Right

## **LRT-Done Right response to Southwest Light Rail Supplemental DEIS**

### **3.4.1.2 Acquisitions and Displacements**

#### **B. Potential Acquisitions and Displacements Impacts**

Comment: We request more information about 3400 Cedar Lake Parkway, a strip of land valued by the City of Minneapolis \$2.1 million.<sup>1</sup> For years, the Hennepin County property tax website listed this parkland as owned by the Minneapolis Park and Recreation Board. Meanwhile, in discussions concerning SWLRT, the Met Council disputed this information, maintaining that the property belongs to BNSF. Recently, however, Hennepin County changed its website to say the property belongs to BNSF.<sup>2</sup> What is the basis of the change? What evidence does the Council have that the land is owned by BNSF railroad? Where are the supporting documents, or what was the process by which this change was made? Did the property change hands via a gift of public property? If so, when and why did that happen? If the property is indeed owned by the Park Board, then a compliance analysis will need to be conducted to comply with both Section 106 and 4(f).

In Short-Term Acquisition and Displacement Impacts, the Council states that “[s]hort-term occupancies of parcels for construction would...change existing land uses” including “potential increases in noise levels, dust traffic congestion, visual changes, and increased difficulty accessing residential, commercial and other uses.” The Council should say what the plans are to mitigate these effects for residents and businesses. Most important, how will prompt emergency fire, medical and police access be maintained?

In Short-Term Acquisition and Displacement Impacts, the Council discusses plans for remnant parcels without acknowledging its commitment with the City of Minneapolis in the Memorandum of Understanding. The MOU documents the Council's agreement to convey property they own or acquire from BNSF or HCRRA in the Kenilworth Corridor that is not needed for the Project or freight rail to the Minneapolis Park and Recreation Board for use as parkland. Please see:  
<http://metro council.org/METC/files/f7/f7d41cfb-a062-46c7-942d-0785989da8a0.pdf>

Based on figures listed on the Hennepin County property tax website, annual property taxes payable just for the St. Louis Park properties listed as potential FULL parcel acquisitions in Table 3.4-3 total approximately \$240,000. Yet Section 3.4.3, Economic Effects, states that the annual reduction in property tax revenue to the City of St. Louis Park for all full AND partial acquisitions is only \$35,940. The SDEIS lists plans for partial acquisition of properties owned by Calhoun Towers, Calhoun Isles Condo Association, Cedar Lake Shores Townhomes, and other private property in Minneapolis, but identifies no property tax loss for Minneapolis. The Council should explain the calculations it used to conclude that the property tax losses are so low or even nonexistent. Although we understand that the Council may not wish to release dollar figures for specific property acquisitions at this time, the public must nevertheless be assured that the Council is not both minimizing the costs of acquiring these properties and ignoring the fact that taxpayers will need to compensate for a shrunken property-tax base, which we estimate would exceed \$4 million annually (based on an estimated 5 percent decline in property value for private homes and commercial buildings most impacted by SWLRT).

### **3.4.1.3 Cultural Resources**

#### **B. Potential Cultural Resources Impacts**

**This section identifies the potential long-term and short-term impacts to the archaeological and architecture/history resources listed in or eligible for the NRHP.**

#### **Long-Term Direct and Indirect Cultural Resources Impacts.**

Comment: Minneapolis residents have continually expressed concern with the impact the project will have, both during construction and after operation of SWLRT, on cultural resources in the City.

As stated by the Minnesota State Historic Preservation Office (MnSHPO), an adverse effect on one contributing feature is an adverse effect on an entire historic district. Therefore, the conclusion that the project will have an adverse effect on the Lagoon means that there will be an adverse effect on the Grand Rounds Historic District as a whole, as indicated in the SDEIS.

<sup>1</sup> See <http://apps.ci.minneapolis.mn.us/PIApp/ValuationRpt.aspx?pid=3202924120001> and <http://apps.ci.minneapolis.mn.us/PIApp/GeneralInfoRpt.aspx?pid=3202924120001>

<sup>2</sup> See <https://gis.hennepin.us/property/map/default.aspx>

Section 3.1.2.3 of the SDEIS lists possible mitigation measures that *may* be included in the Section 106 agreement:

- Consultation with MNSHPO and other consulting parties during the development of project design and engineering activities for locations within and/or near historic properties
- Integration of information about historic properties into station area planning efforts
- Recovering data from eligible archaeological properties before construction
- Consultation with MNSHPO and other consulting parties during construction to minimize impacts on historic properties
- Preparation of NRHP nominations to facilitate preservation of historic properties
- Public education about historic properties in the project area

*None of these measures can avoid, minimize or mitigate the long-term adverse effects of the project on the Grand Rounds Historic District in a meaningful way.* The noise impacts, including bells and horns, will be audible from distances within and beyond the Area of Potential Effect, and include not only the Lagoon area but also Lake of the Isles and Cedar Lake as well as the other parts of the Grand Rounds Historic District. *Noise and vibration impact studies should be done from a baseline assuming no freight, as HCRRRA had committed to do and as was contemplated in the DEIS.* Despite the requirement that such impacts be minimized, co-locating both freight and light rail in the Kenilworth Corridor results in the opposite outcome.

The proposed bridges over the Lagoon would have an adverse impact because of their size and scale, inconsistency with the historic cultural landscape of the channel, the noise and vibrations caused by the light rail vehicles traveling the bridge and the fact that it may not be possible to mitigate the impacts of the new bridges, as stated by the MPRB earlier in the 106 process. The appearance of the new bridge structures and the sounds associated with modern rail infrastructure would alter the characteristics of “community planning and development,” “entertainment and recreation,” and “landscape architecture” that make the Lagoon eligible for NRHP designation, and will adversely affect the character and feeling of the Lagoon and how people use the historic resource, including the experience of using the waterway under the new structures. Given that the Council is proceeding with this project in spite of this adverse effect, we hope that designers will continue to be vigilant about minimizing the impact on the setting and feeling of the historic channel, including audible and visual intrusions that will alter the park-like setting of the Lagoon, a vital element of its historic character. These concerns extend to Cedar Lake and the beaches on it nearest to SWLRT, as well as the visual impact on Park Board Bridge #4, Lake of the Isles, Lake of the Isles Parkway and Lake of the Isles Historic District.

Table 3.4-5 lists cultural resources that have been preliminarily considered to have no adverse effect from the Project, because of continued consultation with MnSHPO and certain unidentified avoidance/minimization/mitigation measures. Throughout this table, “consultation” is offered as mitigation. But “consultation” is not the same as “mitigation.” Consulting means talking; mitigation means doing something. The SDEIS does not identify what it could do that would mitigate negative impacts. In any event, the possible mitigation measures listed above would also not significantly address impacts on the cultural resources listed in this table. *The Council must be responsible for ensuring that “continued consultation” is meaningful by conducting assessments and proposing specific mitigation solutions before the 106 agreement is written and finalized, as it is impossible to avoid adverse effects after SWLRT construction and operations commence.* See also our comments below on 3.5 Draft 4(f) Section Evaluation Update.

Cultural resources covered in table 3.4-5 include Lake of the Isles Residential Historic District, Kenwood Parkway Residential Historic District, Lake Calhoun, Cedar Lake Parkway, Cedar Lake, Park Bridge #4, Lake of the Isles Parkway, Lake of the Isles, Kenwood Parkway, Kenwood Park, Kenwood Water Tower and four NRHP listed or eligible homes in the Area of Potential Effect. Station activity will change traffic and parking patterns in the neighborhood and introduce long-term visual and audible intrusions that adversely impact these historic resources. Concerns about the long term Project impact on some or all of these cultural resources include the following:

- Long-term visual and audible intrusion from changes in traffic patterns related to station access: We are concerned that auditory impacts and changes in traffic and parking patterns will adversely affect the integrity of setting and feeling that make Kenwood Park, Kenwood Parkway, Lake of the Isles Parkway, Cedar Lake Parkway and the related residential historic districts, and the four individual homes listed on or eligible for the NRHP. A traffic analysis must be conducted and a plan to mitigate adverse impacts proposed and discussed before the 106 agreement is drafted.
- Noise effects from LRT operations: Audible intrusion from train operations, including bells and horns and the impact of trains going in and out of the tunnel, will alter the environment of the historic resources and the characteristics that make certain of these resources eligible for the NRHP. It seems unlikely that a few homes in the Kenwood Parkway Residential Historic District are the only cultural resources that will be adversely affected by noise from train operations.
- Infrastructure surrounding the tunnel and the massive tunnel portals could adversely affect the historic integrity of the resources. Signage along the historic parkways could also have an adverse effect. Specific design elements should be proposed to minimize these impacts and should be reviewed as part of the 106 process.

The degree of concern regarding the short-term impact of SWLRT construction on all of these cultural resources cannot be overstated. Noise and vibration sensitive resources need to be identified. The public needs to see a comprehensive noise and vibration study and analysis for the Project during construction including the impact of increased truck and construction equipment traffic. We would like details on what will be included in the "project wide construction plan." It should identify measures to be taken during construction to protect all historic properties from project-related activity including construction related traffic. We need real plans to prevent or repair damage resulting project activities, incorporating guidance offered by the National Park Service in Preservation Tech Note #3: Protecting a Historic Structure during Adjacent Construction, as well as an agreement that specifies how these potential impacts will be monitored and mitigated. The Council previously communicated to a neighborhood group whose residents experienced damage from a Council project that "[c]ontinuing with future projects, our goal is to ensure that claims are promptly and appropriately investigated to determine whether or not they may be related to the project. Depending on the facts of the claim, this may involve independent experts." We request that the Council communicate with owners of historic homes in the APE prior to construction to establish baselines and mitigation commitments.

Table 3.4-5 is confusing in that it lists station area development as a possible effect on the Kenwood Parkway Residential Historical District that will require continued consultation. The Met Council needs to explain what development it is referring to, because none is anticipated in this district. For example, the Southwest Community Works website and documents state: "Future development is not envisioned around this station...."

<http://www.swlrtccommunityworks.org/explore-corridor/stations/21st-street-station>

See also

<http://www.swlrtccommunityworks.org/~media/SW%20Corridor/Document%20Archive/investment-framework/ch-4-penn.pdf>

#### **3.4.1.4 Source: MnDOT CRU, 2014.Parklands, Recreation Areas, and Open Spaces**

##### **Long-Term Direct and Indirect Parklands, Recreation Areas, and Open Spaces Impacts**

Comment: As noted in our comments on 3.4.1.2 above, we request more information about 3400 Cedar Lake Parkway. This parkland has long been listed on the Hennepin County property tax website as belonging to the Minneapolis Park and Recreation Board. What evidence has the Council or Hennepin County discovered to recently change the website to indicate that this \$2.1 million property is owned by BNSF railroad? Does the conclusion of "no long-term direct impact" of the Project on Cedar Lake Park depend on the Met Council taking advantage of a loophole: that documentation conveying this Cedar Lake Park property to the Park Board many years ago may be lacking, even though the intent that it be parkland was understood? Is the conclusion a way to avoid conducting a compliance analysis as would be required under Section 106 and 4(f) if the property belonged to the Park Board?

The SDEIS states: "None of the indirect impacts on parklands, recreation areas, and open spaces from the LPA in the St. Louis Park/Minneapolis Segment would substantially impair the recreational activities, features, or attributes of those parklands, recreation areas, and open spaces." We dispute this conclusion. The permanent installation of freight rail and light rail in the Kenilworth Corridor that is too narrow to permit separation in accordance with AREMA and FTA guidelines creates a safety risk that would directly impair park activities in the event of a derailment and/or explosion of flammable materials.

For comment on the indirect impacts of the LPA in the form of visual, noise, and/or access impacts, please see comments to sections 3.4.1.5, 3.4.2.3, and 3.4.4.4 of this Supplemental Draft EIS.

##### **Short-Term Parklands, Recreation Areas, and Open Spaces Impacts**

Comment: Please specify the extent to which the stated "standard" measures would be sufficient to protect this environmentally sensitive parkland.

During construction, how can the safety of park and trail users (Park Siding Park, Cedar Lake Park, Lake of the Isles Park, and nearby trails and lakes) be assured, given that unit freight trains of 100 or more cars containing Class III flammable liquids, especially ethanol, travel through this narrow corridor in close proximity to a construction pit and materials, without whatever protective walls will later be installed?

#### **Section 3.4.1.5 Visual Quality and Aesthetics**

Excerpt from City of Minneapolis RESOLUTION 2010R-008 by Colvin Roy:

**Be It Further Resolved that the current environmental quality, natural conditions, wildlife, urban forest, and the walking and biking paths be preserved and protected during construction and operation of the proposed Southwest LRT line.**

**Be It Further Resolved that any negative impacts to the parks and park-like surrounding areas resulting from the Southwest LRT line are minimized and that access to Cedar Lake Park, Cedar Lake Regional Trail, Kenilworth Trail and the Midtown Greenway is retained.**

While we appreciate and agree that the visual impact from Viewpoints 2, 3, and 4 are recognized as being substantial, we strongly disagree and contest the idea that the level of visual impact north of the Kenilworth Channel crossing (including Viewpoints 5 and 6) will be “not substantial” (pages 3-167, 168). The negative visual impact of SWLRT in the Kenilworth Corridor, especially with freight rail remaining (contrary to all previous planning), will be *substantial throughout the corridor*.

The SWLRT plan proposes clear-cutting in the Kenilworth Corridor, a rare urban natural resource. It would remove a large amount of green space and thousands of trees, replacing them with an overhead catenary system, tracks and ballast. The park-like environment will be permanently degraded by this infrastructure, as well as by the approximately 220 daily trains traveling over the historic Kenilworth Lagoon and through the corridor.

Clearly, the visual impact of deforestation of this area will be great, especially given that the Kenilworth Trail is used by well over 600,000 annually. Over the past 7 to 10 years, neighbors and trail users have clearly expressed to Hennepin County and the Met Council the very high value they place on the green space, wildlife and bird habitat, trees and other vegetation in the Kenilworth Corridor.

The visual impact to the park-like environment is exacerbated by the continuing presence of freight rail, which was expected to be removed from the Kenilworth corridor at the time of the Alternatives Analysis, the Locally Preferred Alternative decision, and the 2012 DEIS.

The SDEIS says the consultant determining the *visual qualities* of the corridor relied on Google Earth, files of the revised project layout, and selected “photographically documented” views (Appendix J, section 2B). It does not say the consultant actually set foot in the area, or consulted any stakeholders. Assuming that is the case, we are most discouraged at the slipshod research methods used in this important document, and find it even less credible.

At **Viewpoint 5**, we support all efforts to create an “attractive design” for the bridges crossing the Kenilworth Channel. The three new bridges will certainly become a “focal point,” adding large cement structures and heavily impacting the setting and feeling of this element of the Historic Chain of Lakes and the Kenilworth Trail. An attractive design for these bridges does not compensate for the vegetative clearing. The character of the City of Lakes’ signature canoe, kayak and skiing route from Lake of the Isles through the Kenilworth Channel to Cedar Lake will be fundamentally and permanently degraded. There will be a substantial negative visual impact from the level of the water as well as the level of the trail.

At **Viewpoint 6**, the SWLRT project plans to remove a significant amount of vegetation along the edge of Cedar Lake Park, as well as trees, plants, and restored prairie currently along the bicycle and pedestrian trails. The claim that removing trees and replacing them with overhead power lines would create a positive visual experience for trail users (“open up the view, making it more expansive”) is absurd on its face and contradicts the clearly expressed will of the Minneapolis City Council and the adjacent neighborhood. The 21<sup>st</sup> Street Station, a slab of concrete and metal with fencing and catenaries, will indeed “create a focal point” — that is to say, a negative one. It is not credible, and it is even laughable, to assert that a concrete slab will positively impact the visual qualities of a spot immediately adjacent to an urban forest and is itself in a “park-like environment.”

*The negative visual impact of SWLRT in the Kenilworth Corridor, especially with freight rail remaining (contrary to all previous planning), will be substantial throughout the corridor. We find it absurd and disingenuous for the Council to claim otherwise. The Council must stop pretending that this problem does not exist, and get serious about identifying robust and meaningful mitigation measures for incorporation into the project.*

### **3.4.2.1, 3.4.2.2 Geology and Groundwater, Water Resources**

Comment: LRT Done Right demands that there be a much more significant and transparent discussion regarding the compensatory mitigation for damage to wetlands and aquatic resources in the Minneapolis segment, especially the Kenilworth Channel and Cedar Lake. While a permit application is required, the SDEIS identifies that there will be damage done to aquatic resources but does not specify the level of damage done during construction and then during operation of the line. The further impairment of these resources is a direct violation of the EPA Clean Water Act and will degrade one of the crown jewels of the Minneapolis "City of Lakes" water resources. Residents swim, paddle, and recreate in those resources, and to callously suggest that a section 404 permit will just address those concerns is alarming.

Further, LRTDR is not convinced that sufficient analysis has been done on existing contamination in the Kenilworth Corridor. Southwest Project Office has already stated that additional contamination is likely to be found, and while the additional contamination is stated to be covered by the contingency fund, LRTDR finds this approach to be irresponsible budgeting without fully knowing what contamination exists and if enough is actually budgeted in the fund. The Kenilworth Corridor north of 21<sup>st</sup> St is a former rail yard that housed up to 58 rail lines during its peak, and was in service for decades. The SDEIS itself specifies the numerous toxic contaminations in such soil due to its former use. LRTDR strongly opposes disturbing the land and releasing contamination into the water and air.

### **Southwest LRT Supplemental Draft EIS - Supporting Documents and Technical Reports: SWLRT Kenilworth Shallow LRT Tunnel Basis of Design Technical Report (Met Council, 2014d):**

#### **An Existing Sewer Force Main Crosses the Proposed Location of the SWLRT South Tunnel in the Kenilworth Corridor.**

The removal and relocation of recently installed dual force mains, running beneath the freight tracks and Kenilworth Trail (between Depot Street and W. 28<sup>th</sup> Street) at the site of the proposed south tunnel, will be necessary to accommodate co-location of LRT with freight in the Kenilworth Corridor. The presence of the existing dual sewer force mains has design, construction, and cost implications on the shallow tunnel, which are not addressed in the SDEIS. The SDEIS technical drawings for the shallow tunnel do not indicate the existing force sewer main or the sewer relocation plan. Although Metropolitan Council is clearly aware of this complication, since it refers to replacing 200 feet of the dual 18-inch sanitary sewer force mains at Depot Street in its 9/19/14 CTIB capital grant application, it nevertheless does not address its design impacts and costs in the SDEIS in the Kenilworth Shallow Tunnel Design Technical Report.

In 2013 the Metropolitan Council Environmental Services (MCES) installed replacement sewer force mains between France Avenue and Dean Parkway. The force mains follow Sunset Boulevard to Depot Street and then crosses under active freight railroad tracks and the Kenilworth Trail to West 28th Street. The force mains installation at this location was completed by tunneling under, and placed perpendicular to, the railroad tracks and Kenilworth Trail so as not to disrupt active rail operations. The tunneling process required construction of two tunneling (jacking) pits on either side of the tracks. One pit was located at Depot Street and the other was located at the end of West 28th Street adjacent to Park Siding Park. The tunneling pit near Park Siding Park measured 16 by 34 feet and was approximately 27 feet deep. The excavation of these pits required the use of a crane and an excavator.

The SWLRT south tunnel construction plan says a pit would be dug to a depth of approximately 35 feet in this same location. The existing force main crossing consists of a 60-inch diameter tunneled steel "casing" pipe. The distance to the top of the casing pipe is approximately 17 feet and the distance to the bottom is 22 feet. The dual 18-inch force main pipes pass through this tunneled casing. The current placement of the force main interferes with the proposed location of the tunnel construction pit. The force main will need to be removed and relocated either above the proposed tunnel or below the tunnel to a depth greater than approximately 45 feet below ground level. See diagrams A through C below. If the force main is relocated above the shallow tunnel, the tunnel will need to be dug deeper in order to accommodate the force main above. This will result in an increased steepness in the incline of descent and ascent of the entrance and exit to the tunnel respectively. If LRT trains cannot navigate said increased grade change then it may require building a longer tunnel in order to safely allow trains to exit and enter at a lesser incline/decline, adding to the cost and impact.

Risks associated with possible stray electrical current traveling in the ground from the LRT power lines to the sewer force mains have not been identified or addressed in the SDEIS.



The removal and re-installation of the dual force mains will have Economic, Social, and Environmental impacts:

**Economic costs:**

Long term increase in cost of the SWLRT project of an undetermined amount as a result of co-locating freight and LRT, including:

1. Cost of removing and relocating the sewer force main located under the freight tracks and the Kenilworth Trail.
2. Cost of possible redesign of the south tunnel to accommodate force main relocation if it is reinstalled above the south tunnel.
3. Costs associated with re-engineering or lift station(s) that may be required to ensure adequate force is maintained in the sewer main if the main is re-located to a deeper position (i.e., from approximately 22 feet to more than 45 feet below ground level).
4. Cost of remediation of any portions of Park Siding Park that may be affected during removal/relocation of the force sewer main.
5. Cost of roadwork at Depot Street to remove/relocate force main.
6. Cost of damages to walls, ceilings and foundations of neighboring residences as a result of construction to remove/relocate the force sewer main.
7. Costs to remediate noise and vibrations impacts on the community that may be experienced during the construction period and post construction period should lift station(s) be required.

**Social:**

**Parkland, Recreation, Open Spaces and Safety Impact:**

Short-term construction impact - Portions of Park Siding Park (a Section 4 (f) property) may again be affected in order to accommodate the removal and reinstallation of this force sewer main and construction of tunneling (jacking) pits. The original construction resulted in closure of the park to users for an extended period, installation of a temporary detour through the park to accommodate the closure of Dean Court, destruction of park vegetation, gardens and lighting, and the removal of playground equipment. Some of these same impacts may again occur during the removal/relocation of the force main and construction of associated jacking pits. In addition, the construction of the south tunnel is expected to take 2-3 years and requires a deep open pit adjacent to Park Siding Park. The access and enjoyment of this park will be affected by the tunnel construction during this extended time frame and presents a dangerous environment for nearby park users and freight rail operations. The mitigation and cost of remediation of the parkland have not been addressed in the SDEIS.

**Environmental:**

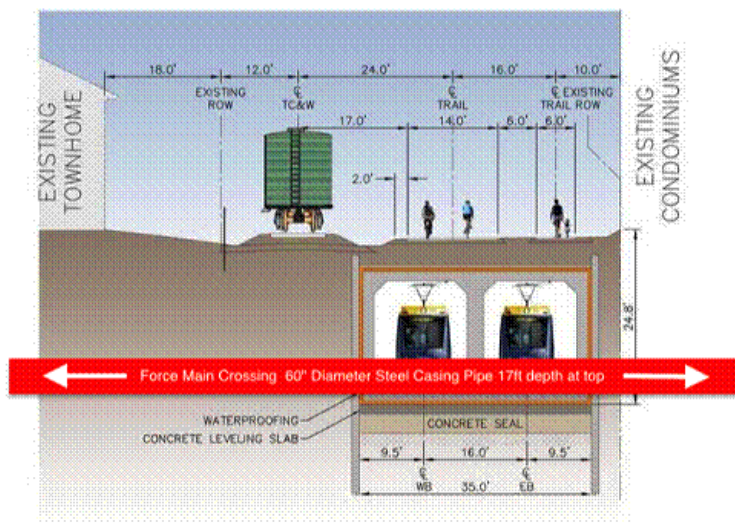
**Noise:**

Short-term noise impacts - Removal and reinstallation of the force line will result in noise impacts of an undetermined level to both neighboring residents and Park Siding Park users as a result of both construction activities and construction vehicles. Mitigation plans/cost are not included in the SDEIS and need to be addressed.

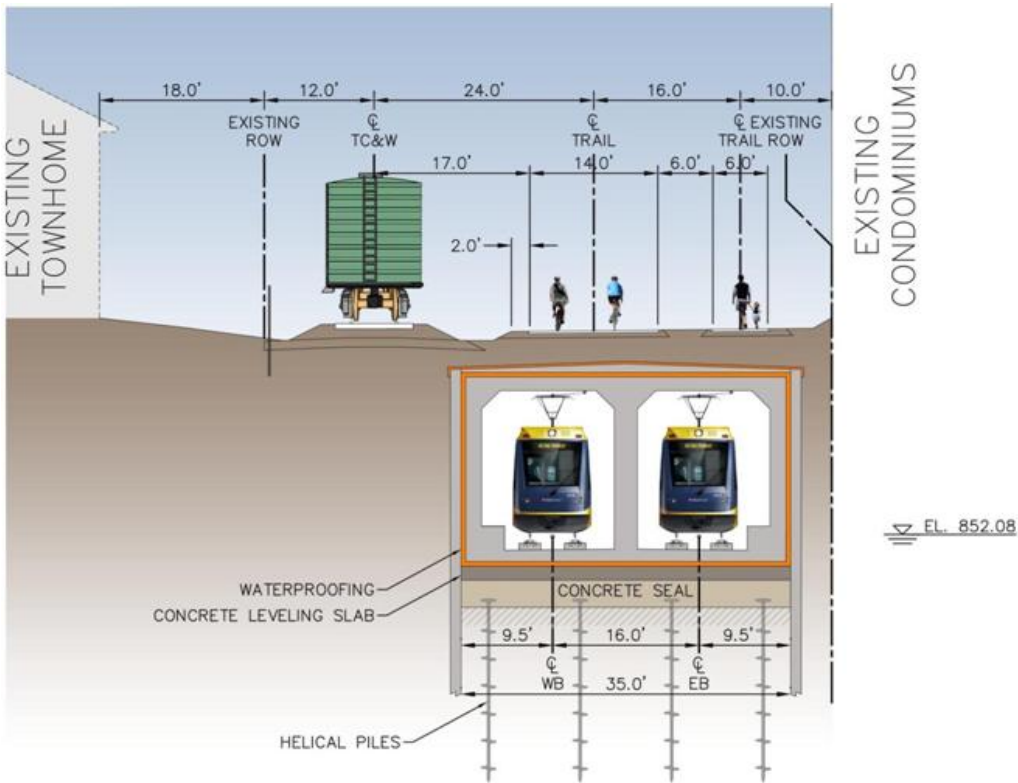
**Vibration:**

Short-term vibration impacts - Effects of construction activities and, to a lesser extent, construction vehicles will have an impact on park users, neighbors and their residences. Vibration and associated ground-borne noise impacts may damage walls, ceilings and foundations of nearby residences, as was experienced in the original construction of this force line. Mitigation plans/cost are not included in the SDEIS and need to be addressed.

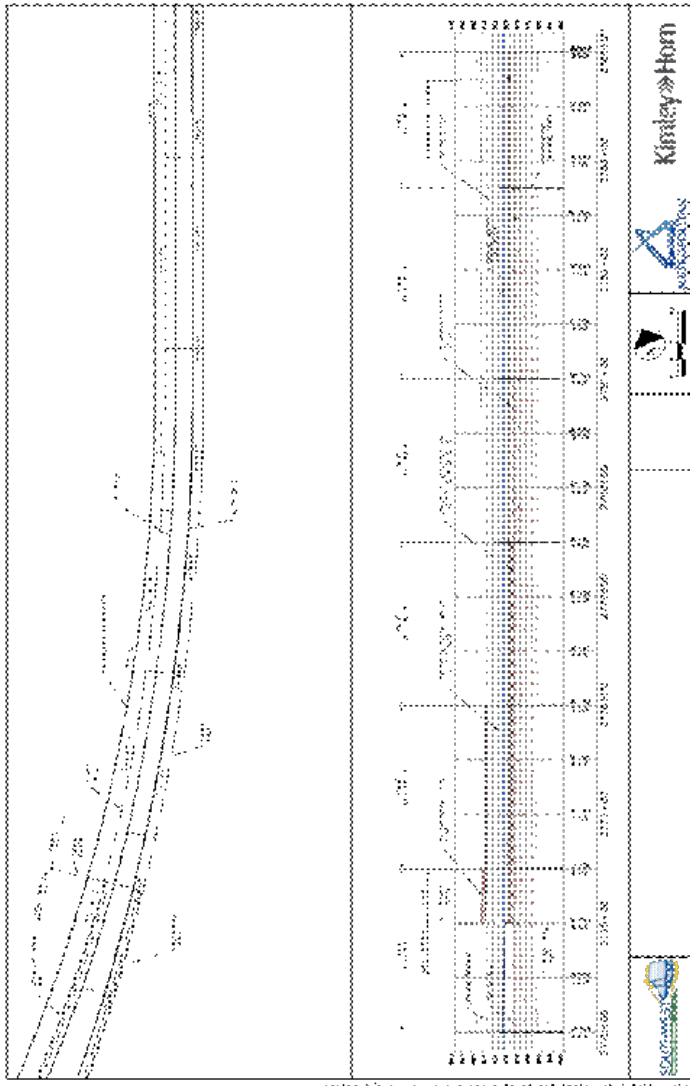
**Diagram A** – Existing sewer force main at approximately 22 feet below grade obstructs planned location of SWLRT south tunnel in the Kenilworth Corridor, which requires an estimated 45 feet below ground level for construction pit and helical piles.



**Diagram B** – Typical Kenilworth Shallow LRT Tunnel Section per SDEIS



**Diagram C** - SWLRT South Tunnel Typical Cell Sequencing per SDEIS Note: the helical piles are shown at approximately 820 feet above sea level which is approximately 45 feet below the ground level.



### 3.4.2.3 AND 3.4.2.3 NOISE AND VIBRATION

Comment: The SDEIS greatly understates both noise and vibration impacts of SWLRT.

- It uses wrong data as the fundamental framework for noise and vibration analyses. The sole purpose of this SDEIS is to assess the impact of changes made in the SWLRT plan since the 2012 DEIS; the baseline data used in this study should therefore have reflected that 2012 plan — which *did not include a freight train*. However, the SDEIS bases its noise and vibration data on a scenario that *does* include a freight train, thereby misleadingly minimizing the degree to which noise and vibration would be increased above what was indicated in the 2012 DEIS. Use of the wrong baseline data means that in this section the document fails to meet its goal of evaluating “the result of adjustments to the design of the Southwest LRT Project since the publication of the [Draft EIS](#) in 2012.”<sup>3</sup> *This defect renders the noise and vibration sections of the SDEIS fundamentally flawed and misleading. They need to be reworked with appropriate and correct data.*
- The SDEIS estimates noise and vibration impacts from points that would not be the most severely impacted. The SDEIS does not measure impacts on residences closer than 45 feet from the SWLRT tracks, whereas the closest homes to the LRT tracks are only 31 feet away. The CIDNA-sponsored study by ESI Engineering raised this problem with respect to the 2012 DEIS, but it has not been reflected and incorporated into the SDEIS.
- The SDEIS effectively ignores the impacts of construction. See more below.

#### Noise 3.4.2.3

Comment: When the Met Council chose the present route for SWLRT between the Chain of Lakes through the Kenilworth Corridor, and included “co-location” which will make the existing freight rail permanent, the project implicitly accepted the responsibility to respect the natural and built environments that it travels through as well as the people who bike, walk, recreate, and live there. We believe that this responsibility has not been taken seriously and the following describes why.

**SWLRT noise impacts substantially minimized:** We believe that the SDEIS substantially minimizes the noise impacts associated with the proposed SWLRT. The noise impact of SWLRT in this area of Minneapolis will be highly significant for a number of reasons, but most notably because of the tranquility, recreational, park, and residential use currently existing in and bordering the Corridor. Some have compared the proposed SWLRT route with the Blue Line (Hiawatha) and the Green Line (Central Corridor down University Avenue). But such comparison is inappropriate, since the Blue and Green lines run immediately adjacent to commercial thoroughfares or four-lane roads that carry cars and heavy trucks around the clock. By contrast, the Kenilworth area is a quiet environment, and is part of the **Grand Rounds National Scenic Byway**.<sup>4</sup> By contrast, the Kenilworth Corridor is a unique, quiet environment, part of the Grand Rounds National Scenic Byway.

The SDEIS coolly states that 24 residences would suffer Severe or Moderate noise impact. Translated, this means the noise of 220 light-rail trains running daily from 4 a.m. to 2 a.m. would fundamentally transform the adjacent neighborhood with near-constant noise and vibration at sound levels up to 106 dBA (the sound of warning bells — equal to the sound of a jet take-off 1,000 feet away). As noted in Appendix H (SDEIS Noise and Vibrations Memoranda), residences are considered Category 2 buildings, with the expectation that sleep occurs there.

The noise levels given in Noise Fact Sheet (Appendix H p. 19) state the following: LRT trains traveling at 45 mph generate maximum typical noise levels of 76 dBA at 50 feet (equivalent to freeway noise at 50 feet), 71 dBA at 100 feet, and 66 dBA at 200 feet. Adding 211-220 LRT three-car trains to the Kenilworth Corridor day and night, each producing such elevated noise levels, would be a severe and overwhelming intrusion, drastically increasing the noise generated. This would hold true even if the only noise increase were from the LRT trains traveling at their stated speed, per the SDEIS, of 45 mph.

<sup>3</sup> <http://metro council.org/swlrt/sdeis>

<sup>4</sup> A National Scenic Byway is a road recognized by the [United States Department of Transportation](#) for one or more of six “intrinsic qualities”: archeological, cultural, historic, natural, recreational, and scenic. Congress established the program in 1991 to preserve and protect the nation’s scenic but often less-traveled roads and promote [tourism](#) and economic development. The National Scenic Byways Program (NSBP) is administered by the [Federal Highway Administration](#) (FHWA).

Our conclusion that the LRT trains in the midst of a residential and recreational area would be an overwhelming intrusion is supported by the analysis below, which assesses the combined impacts of LRT frequency, time of day or night of LRT, and LRT bell noise intensity and frequency identified in Appendix H, SDEIS p.3-13 and p.3-18.

#### LRTDR Analysis of SDEIS Appendix H Table 1 & p. H-4 Data

- Bells are sounded for 5 seconds prior to grade crossings, as vehicles approach grade crossings, such as the 21st Street in the Kenilworth Corridor
- Grade crossing bells are used at grade crossings for 20 seconds for each train; 21st Street is also a grade crossing.
- Bells are sounded twice at stations — once entering and once exiting station platforms, such as the 21st Station (SDEIS gives no duration. We request the duration of bells sounding when entering and exiting station platforms be made public. This information is needed for accurate noise impacts to be known.
- Total bell time (not counting the brief pause between entering and exiting the station) is known or given as more than 25 seconds per train. It is unknown how much longer than 25 seconds the bells will sound, as exit/enter bell duration is not given in the SDEIS.

#### WEEKDAYS

##### Early morning 4:00 AM – 5:30 AM

- ~~6 to~~ 8 trains per hour ~~equals~~ ~~9 to~~ 12 trains per day between 4:00 AM and 5:30 AM
- ~~This means~~ 1 SWLRT train at 66 ~~to~~ 76 dBA every 7.5 ~~to~~ 10 minutes
- ~~Would produce~~ 25 ~~plus~~ seconds of bell noise (5 seconds at 88 dBA, ~~plus~~ 20 seconds at 106 dBA, ~~plus~~ unspecified seconds of bell noise as train enters and exits the station) every 7.5 ~~to~~ 10 minutes

##### Early morning to evening 5:30 AM – 9:00 PM

- 12 SWLRT trains per hour ~~equals~~ 186 trains per day between 5:30 AM and 9:00 PM
- ~~This means~~ 1 SWLRT train ~~at~~ every 5 minutes
- ~~Would produce~~ 25 ~~plus~~ seconds of bell noise (5 seconds at 88 dBA, ~~plus~~ 20 seconds at 106 ~~A~~ dBA, ~~plus~~ unspecified seconds of bell noise as train enters and exits the station) every 5 minutes.
- At least 10% of every 5 minute period in the Kenilworth Corridor will consist of 88dBA and 106 dBA bell noise
- At least 6 minutes of every hour from early morning to 9 PM in the Kenilworth Corridor will consist of 88dBA and 106 dBA bell noise

##### Evening to early morning 9 PM to 2 AM

##### 9 PM to 11 PM

- ~~6 to~~ 8 trains per hour ~~equals~~ 12 ~~to~~ 16 trains per ~~day~~ evening between 9 PM and 11 PM
- ~~This means~~ 1 SWLRT train ~~at~~ every 7.5 ~~to~~ 10 minutes
- ~~Would entail~~ 25 ~~plus~~ seconds of bell noise (5 seconds at 88 dBA, ~~plus~~ 20 seconds at 106 dBA, ~~plus~~ unspecified seconds of bell noise as train enters and exits the station) every 7.5 ~~to~~ 10 minutes

##### 11 PM – 12AM

- 2 trains per hour ~~equals~~ 2 trains per ~~day~~ night between 11 PM and 12 AM
- ~~This means~~ 1 SWLRT train every 30 minutes
- ~~Would entail~~ 25 ~~plus~~ seconds of bells ((5 seconds 88 dBA, ~~plus~~ 20 seconds at 106 dBA, ~~plus~~ unspecified seconds of bell noise as train enters and exits the station) every 30 minutes

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<b>Very early morning 12 AM – 2 AM</b>	Formatted: Font: 9 pt, No underline
<ul style="list-style-type: none"> <li>1 to 2 trains per hour equals 2 to 4 trains per day between 12 AM and 2 AM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>This means 1 SWLRT train every 30 to 60 minutes</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 30 to 60 minutes</li> </ul>	
<b>Very early morning 2 AM – 4 AM</b>	Formatted
<ul style="list-style-type: none"> <li>2 hours of no LRT trains equals baseline current noise levels</li> </ul>	Formatted
<b>Total equals 211-220 SWLRT three-car trains per weekday</b>	Formatted: Font: 9 pt, Italic, No underline
<b>WEEKENDS</b>	Formatted: Font: 9 pt
<b>Early morning 4:30 AM to 9 AM</b>	Formatted
<ul style="list-style-type: none"> <li>6-8 trains per hour equals 26 to 36 trains per day between 4:30 AM and 9 AM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>This means 1 SWLRT train every 7.5 to 10 minutes</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes</li> </ul>	
<b>Morning to evening 9 AM – 7 PM</b>	Formatted: Font: 9 pt, No underline
<ul style="list-style-type: none"> <li>12 trains per hour equals 120 trains per day between 9 AM and 7 PM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>This means 1 SWLRT train every 5 minutes</li> </ul>	
<ul style="list-style-type: none"> <li>Would entail At least 25 seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 5 minutes.</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>At least 10% of every 5 minute period in the Kenilworth Corridor will consist of bell noise at 88dBA and 106 dBA bell noise</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>At least 6 minutes of every hour from early morning to evening in the Kenilworth Corridor will consist of bell noise at 88dBA and 106 dBA bell noise</li> </ul>	Formatted: Font: 9 pt, Not Bold
<b>Evening 7 PM to 9 PM</b>	Formatted: Font: 9 pt, No underline
<ul style="list-style-type: none"> <li>8 trains per hour equals 16 trains per day between 7 PM and 9 PM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>This means 1 SWLRT train every 7.5 minutes</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>Would entail 25-plus seconds of bell noise (5 seconds at 88 dBA, plus 20 seconds at 106 dBA, plus unspecified seconds of bell noise as train enters and exits the station) every 7.5 minutes</li> </ul>	Formatted
<b>Late evening 9 PM – 11 PM</b>	Formatted: Font: 9 pt, No underline
<ul style="list-style-type: none"> <li>6 – 8 trains per hour equals 12 to 16 trains per day 9 PM – 11 PM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>1 SWLRT train every 7.5 – 10 minutes</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>25 +-plus seconds of bell noise (5 seconds 88 dBA, plus 20 seconds 106 dBA, unspecified seconds of bell noise as train enters and exits the station) every 7.5 to 10 minutes</li> </ul>	Formatted
<b>Late evening 11 PM – 12 AM</b>	Formatted: Font: 9 pt, No underline
<ul style="list-style-type: none"> <li>4 trains per hour equals 4 trains per day between 11 PM and 12 AM</li> </ul>	Formatted
<ul style="list-style-type: none"> <li>This means 1 SWLRT train every 15 minutes</li> </ul>	Formatted: Font: 9 pt, Not Bold
<ul style="list-style-type: none"> <li>11 PM to 12 AM weekend train frequency is double the weekday frequency of 11 AM to 12 AM</li> </ul>	Formatted



- ~~Would entail 25-plus~~ seconds of bell noise (5 seconds 88 dBA, ~~plus~~ + 20 seconds at 106 dBA, ~~plus~~ + unspecified seconds of bell noise as train enters and exits the station) every 15 minutes

#### ~~Very early morning 12 AM to 2 AM~~

- ~~2 to~~ 4 trains per hour ~~=equals~~ 4-8 trains per day between ~~12 AM and~~ 2 AM
- ~~This means~~ 1 SWLRT train every 15 ~~to~~ 30 minutes
- 12 AM ~~to~~ 2 AM ~~the~~ weekend train frequency is double ~~the~~ weekday frequency ~~of~~ 12 AM ~~to~~ 2 AM
- ~~25-plus~~ seconds of bell noise (5 seconds at 88 dBA, ~~plus~~ + 20 seconds at 106 dBA, ~~plus~~ + unspecified seconds of bell noise as train enters and exits the station) every 15 ~~to~~ 30 minutes

#### ~~Very early morning 2 AM – 4 AM~~

- ~~No trains~~ ~~=~~ ~~equals~~ current existing conditions

~~Total =equals 180 -195 SWLRT three?-car trains every weekend day.~~

The result of LRT noise would be that the corridor will be permanently changed from a quiet, tranquil area sought by pedestrians, cyclists, and outdoor enthusiasts, and a highly desirable residential area to an area severely disrupted by the noise of a highly mechanized transit route.

Beyond permanently degrading the area, there will be multiple public health consequences of SWLRT noise in the corridor. The impact of repetitive noise intrusion on neighborhood public health will be significant. For example, regarding the obvious potential for sleep interruption caused by SWLRT noise (and there will be more trains during the late evening and early morning weekend hours) a research review published in the December 2014 edition of *Sleep Science*, summarizes:

Emerging evidence that these short-term effects of environmental noise, particularly when the exposure is nocturnal, may be followed by long-term adverse cardio metabolic outcomes. Nocturnal environmental noise may be the most worrying form of noise pollution in terms of its health consequences because of its synergistic direct and indirect (through sleep disturbances acting as a mediator) influence on biological systems. Duration and quality of sleep should thus be regarded as risk factors or markers significantly influenced by the environment. One of the means that should be proposed is avoidance at all costs of sleep disruptions caused by environmental noise.”

The article continues:

The World Health Organization (WHO) has documented seven categories of adverse health and social effects of noise pollution, whether occupational, social or environmental. The latter [sleep disturbance] is considered the most deleterious non-auditory effect because of its impact on quality of life and daytime performance. Environmental noise, especially that caused by transportation means, is a growing problem in our modern cities. A number of cardiovascular risk factors and cardiovascular outcomes have been associated with disturbed sleep: coronary artery calcifications, altherogenic lipid profiles, atherosclerosis, obesity, type 2 diabetes, hypertension, cardiovascular events and increased mortality....during the past year, the relationship between insomnia and psychiatric disorders has come to be considered synergistic, including bi-directional causation.”<sup>5</sup>

There is growing evidence that the opportunity to benefit from greenspace — what some mental health experts have referred to as “soft fascination”<sup>6</sup>— supports social and psychological resources and recovery from stress. The perpetual and repetitive noise from SWLRT would interrupt the restful and restorative experience enjoyed by tens of thousands of people in the Kenilworth Corridor, at nearby beaches, parks, in the Kenilworth Channel and general environs of Lake of the Isles and Cedar Lake. Such

<sup>5</sup> *Sleep Science*, Volume 7, Issue 4, December 2014, Pages 209-212

<sup>6</sup> British Journal of *Sports Medicine* 2012, “The Urban Brain: Analyzing Outdoor Physical Activity with Mobile EEG”

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opportunities to enjoy nature and relieve stress, though often taken for granted by suburban dwellers, are extremely limited in urban areas, yet equally critical for their mental health.

With healthcare costs and disease prevention being prominent national and local priorities, the economic value of the public health benefit of the Chain of Lakes and Kenilworth Corridor cannot be ignored. *We request a study of the physical and mental health impacts of the noisy, hyper-mechanization of this currently placid area, which plays a key role in the life and character of our neighborhood and the entire City of Minneapolis.*

#### **A. Existing Conditions (p. 3-180)**

**This section describes existing noise-sensitive land uses in the St. Louis Park/Minneapolis Segment and existing noise levels.**

##### **Fundamental defect with baseline noise measurements**

Comment: As noted above, the SDEIS uses wrong data as the fundamental framework for noise analyses. The sole purpose of this SDEIS is to assess the impact of changes made in the SWLRT plan since the 2012 DEIS; the baseline data used in this study should therefore have reflected that 2012 plan — which *did not include a freight train*. However, the SDEIS bases its noise data on a scenario that *does* include a freight train, thereby misleadingly minimizing the degree to which noise and vibration would be increased above what was indicated in the 2012 DEIS. Use of the wrong baseline data means that in this section the document fails to meet its goal of evaluating “the result of adjustments to the design of the Southwest LRT Project since the publication of the Draft EIS in 2012.”<sup>7</sup> *This defect renders the noise section of the SDEIS fundamentally flawed and misleading. It needs to be reworked with appropriate and correct data.*

The SDEIS estimates noise and vibration impacts from points that would not be the most severely impacted. The SDEIS does not measure impacts on residences closer than 45 feet from the SWLRT tracks, whereas the closest homes to the LRT tracks are only 31 feet away. The CIDNA-sponsored study by ESI Engineering raised this problem with respect to the 2012 DEIS, but it has not been reflected and incorporated into the SDEIS.

Further, since aircraft overflights are generally scarce, the average current noise level per hour is extremely low when averaged over a 24-hour period.

Additionally, there are significant seasonal and weather-related variations in noise levels, which cannot be captured when sound is measured during one 24-hour period in the summer.

Finally, in Appendix H, p.2, it is noted, “noise monitoring was performed at other locations not listed in the table. Those sites will either be addressed in the forthcoming Final EIS or no longer fall within the area where they would be potentially impacted by project noise due to design refinements during Project Development.” Since the purpose of the SDEIS is to inform the public and decision makers, and provide opportunity for comment on all areas of concern, in order to fulfill that NEPA mandate, all measurements that were made and publicly financed should be made public.

#### **B. Potential Noise Impacts**

##### **Noise Impacts Measurement Tables (Table 3.4-11, 3.4-12)**

Comment: Following FTA noise assessment guidelines, the 76 dBA LRT noise occurring every 5 minutes is measured as having a lower impact than that actual dBA of 76 because the LRT noise is not continuous. Thus, though this quiet urban area will be exposed to an actual repetitive noise of 76-80 dBA day and night, the rating of the impact is lower and measured as only 51 – 64 dBA in Tables 3.4-11, 3.4-12. The significantly lower measurement lessens the determination of findings of impacts, and therefore, whether impacts are determined as non-existent, Moderate or Severe. *This engineering methodology covers up the actual impact on people of loud repetitive noise in a peaceful setting.*

The 25-plus seconds of repetitive bell noise described in the LRTDR Analysis of SDEIS Appendix H Table 1 & p. H-4 Data above does not appear to be included in the SDEIS noise analysis in Tables 3.4-11, 3.4-12, which would clearly increase the severity of

<sup>7</sup> <http://metro council.org/swlrt/sdeis>

noise impact at all locations. The SDEIS also neglects to report and measure the cumulative effect of LRT and freight train noise. This information would likely show that more than 24 residences would be affected; more of them would be impacted at the severe level, and a greater impact on the Kenilworth Channel and Kenilworth Lagoon Bank.

Furthermore, future projected noise levels of LRT and freight will be higher than the projection inputs used by the SDEIS after the clear cutting of trees and vegetation in the corridor, increasing the impact of noise generated by both SWLRT and the freight rail. When utilizing the Source – Path – Receptor FTA noise impact assessment framework, it is clear that the inputs for each of the three parameters are critical and control the outcomes determining the severity of noise impact. Removal of the trees and vegetation eliminates a significant and well-established noise barrier currently in the path of noise from freight and future SWLRT. *The SDEIS does not address the impact of clear-cutting the trees and vegetation in the Kenilworth Corridor on Moderate versus Severe LRT noise impacts.*

### **Tunnel Swaps Noise for Vibration**

As stated in the SDEIS, the tunnel section of the SWLRT is supposed to eliminate “almost all noise impacts within that segment of the corridor.” It must be noted, however, that these noise impacts will be replaced by vibration impacts; see the Vibration Section below.

### **Analysis of Table 3.4-12**

**Inaccurate land use designation for the Kenilworth Channel:** We strongly challenge the land use designation of the Kenilworth Channel as Category 3. As defined in Appendix H, Category 3 is:

Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches where it is important to avoid interference with such activities as speech and concentration on reading material...”

The SDEIS designates the banks of the Kenilworth Channel as falling within the most noise sensitive Category 1. However, as stated above, the Channel itself is not included in that most highly sensitive designation, but instead is classified as “institutional land use.” Category 1 is defined in Appendix H as:

Tracts of land where quiet is an essential element in their intended purpose. This category includes lands set aside for serenity and quiet, and such land uses as outdoor amphitheaters and concert pavilions, as well as National Historic Landmarks with significant outdoor use.

The SDEIS states the “grassy area on the banks of the Lagoon” falls within Category 1 due to the “passive and noise sensitive recreational activities that occur there (where quietude is an essential feature of the park).” The designation of Category 1 versus 3 for the Kenilworth Channel appears to hinge excessively on one word — the term “passive” — to describe the activities for which the Channel banks are used. However, quietude is equally and very clearly an essential feature of the Kenilworth Channel itself, whose peaceful though not “passive” activities include canoers and cross country skiers gliding serenely on the water or ice while those on the grassy banks look on. The quietude of the Kenilworth Channel is inseparable from the quietude of its grassy banks; therefore both should be Category 1.

*Significantly, the consequences of placing the Kenilworth Channel in Category 3 are 1) that the obligation to mitigate impacts is lowered, and 2) that the threshold to establish severe impact is higher and harder to reach. Had the Kenilworth Channel been accurately designated a Category 1, then the Channel would have been only 1 dBA below “Severe impact.”*

Even with the lowering of the land use category of the Kenilworth Channel to a Category 3, the SDEIS finds a moderate impact of the addition of LRT noise. The footnote to SDEIS Table 3.4-12, states that the noise impact increases as one approaches the LRT line and becomes severe when the channel falls within the HCRRRA right of way.

*While the SDEIS states that the land use categories were made in consultation with the MPRB and MN SHPO, we strongly dispute their coherence and accuracy. If the intention of the SPO is to preserve the character and experience of the Channel, then it must designate it as a Category 1 and then make public the mitigation plans and costs well in advance of the final FEIS.*

**SWLRT Violates the System of Minneapolis Parks:** Horace Cleveland’s visionary master plan, *Suggestions for a System of Parks and Parkways for the City of Minneapolis*, proposed a park system of connecting sites of beauty and natural interest

throughout the city, rather than a series of detached open areas or public squares. The vision of a park “system” has guided the Park Board ever since and is one of the primary reasons for the success and national prestige of the Minneapolis Parks. The SDEIS procedure of singling out specific pieces of park for analysis such as Lilac Park, the Kenilworth Channel and its grassy banks runs fundamentally contrary to the underlying vision of a coherent Minneapolis Park System.

*The presence of perpetual, repetitive LRT noise over the Kenilworth Lagoon and throughout the interconnecting parks and lakes woven throughout this area violates the larger system of the Minneapolis Parks.*  
*Site N 17 (p. 3-182)*

**21<sup>st</sup> Street Station Noise Impacts:** At the proposed 21<sup>st</sup> Street Station, crossing and station bells generating a noise level of 106 dBA and LRT bells generating 88 dBA will seriously add to the overall noise levels for 22 hours a day; only between 2:00 a.m. and 4:00 a.m. will neighborhood residents in this area be able to sleep uninterrupted. The LRTDR Analysis of the SDEIS Appendix H Table 1 & p. H-4 given above shows the impact throughout the day and night.

Further, freight trains may need to use their horns to safely cross 21<sup>st</sup> Street, as is the current case with the “temporary” freight operations. We thus strongly disagree with the characterization of the noise impacts in the 21<sup>st</sup> Street station area as moderate and limited. “Sensitive receptors” in this area will be subject to train arrivals, departures, signal bells and perhaps horns, seriously eroding the quality of life in the neighborhood and reducing the enjoyment of the recreational trail and Cedar Lake Park for users of these regional amenities.

We believe that the residences with noise impacts deemed “moderate” in the SDEIS will likely experience severe noise impacts without proper mitigation, and that in addition to the residences identified, residences along 21<sup>st</sup> Street, 22<sup>nd</sup> Street, and Sheridan Avenues will also experience at least a moderate noise impacts. We further believe that there will be an impact on more residences than the 24 cited in the SDEIS.

Note: The SDEIS misidentifies some of the homes deemed to have a “moderate impact without mitigation” as being on Thomas Avenue South; some of the addresses are actually on Sheridan Avenue South.

**LRT Horns are Likely:** According to the federal Train Horn Rule<sup>8</sup>, locomotive engineers must sound horns at a minimum of 96 decibels for at least 15 seconds at public highway rail grade crossings. Appendix H indicates that LRT Horns are 99 decibels and are sounded for 20 seconds. The SDEIS states that LRT horns would only be sounded at crossings where speeds exceed 45 mph. Since LRT and freight trains may not reach that speed in the Kenilworth Corridor, presumably no horns would be sounded when LRT vehicles cross 21<sup>st</sup> Street. Given the volume of pedestrian, bicycle, and car traffic at this crossing, it is not safe to silence LRT horns at this crossing. The noise created by horns sounding for LRT trains at least 96 decibels for a minimum of 15 (or 99dBA for 20) seconds represents a “severe” noise impact and is therefore prohibitively detrimental to quality of life in a residential neighborhood.

### Issues Not Addressed in SDEIS Noise 3.4.2.3

**Not addressed: Impacts near Portals:** Two areas of potential noise impacts do not appear to be adequately addressed by the SDEIS. First, table 3.4-11 does not appear to cover noise that will be experienced by the homes directly behind the SWLRT tracks after it emerges from the tunnel and crosses the Kenilworth Channel. Since LRT on ballast and tie track produces noise at 81 dBA, we believe that those residences will experience noise at the same level as homes on Burnham Road and Thomas Avenue South. Further, Appendix H notes that noise will increase by 1 dBA for homes within 100 feet of the tunnel entrance/exits. We strongly request that noise impacts be determined for those residences and that they be included in consideration for noise mitigation. We further request that the cost of that additional mitigation be included in the costs of the Final DEIS.

**Not addressed: Tunnel Ventilation System:** Second, noise from the tunnel ventilation systems does not appear to have been considered. The SDEIS states that the tunnel section of the SWLRT is supposed to eliminate “almost all noise impacts within that segment of the corridor.” However, we understand that there will be ventilation fans connected to the tunnels as well as a ventilation “building” planned near Cedar Lake Parkway. The SDEIS neglects assessment of the noise impacts from such a

ventilation system, and this information is critical to determining whether the proposed tunnel would have a positive or negative environmental impact.

Policy-makers and citizens need adequate information on the noise impacts of both the vents and the ventilation building before proceeding with tunnel construction. Appendix H indicates that the fans will operate only on an emergency basis, but we do not see any mention of the ventilation building in the SDEIS. We request clarity on the amount of time each day that they will be operational and creating noise impacts, and the dBA of each.

**Not addressed: Freight Operations:** The existing freight operations, intended to be temporary, are being made permanent. The noise generated by these trains, which often have three or four engines, must be measured and considered in the overall assessment of noise impacts of the SWLRT project.

The SDEIS simply states that the noise issues described above will be addressed in the Final EIS and that they will be mitigated. *We take the strong view that now is the critical and only time to prove that mitigating the noise issues we have described is possible and that the cost of such mitigation is in the budget.*

### 3.4.2.4 Vibration

#### LONG-TERM DIRECT AND INDIRECT VIBRATION IMPACTS

Comment: The SDEIS states, "There are no vibration impacts in this segment [of the SWLRT route]" This claim is not credible in view of advice provided in *Transit Noise and Vibration Impact Assessment*, the FTA's own guidance manual presenting procedures for predicting and assessing noise and vibration impacts of proposed mass transit projects:

Vibration from freight trains can be a consideration for FTA-assisted projects when a new transit line will share an existing freight train right-of-way. Relocating the freight tracks within the right-of-way to make room for the transit tracks must be considered a direct impact of the transit system, which must be evaluated as part of the proposed project. However, vibration mitigation is very difficult to implement on tracks where trains with heavy axle loads will be operating."<sup>9</sup>

The SDEIS says that 54 residences<sup>10</sup> in the "St. Louis Park/Minneapolis" segment (note that all of them are within Minneapolis) will be impacted by the ground-borne noise. This is an unacceptable level of impact on those 54 families.

According to Appendix H, which addresses both noise and vibration, the table titled Typical Maximum Noise Levels (dBA) on page H-19 quantifies the dBA for LRT, freight and then lawnmowers and buses idling. The dBA for freight rail in that same table is shown for a speed of 20 MPH. The freight in the Kenilworth Corridor travels at a maximum of 10 MPH. For comparison purposes, the assessment should use the dBA of freight trains traveling at 10 mph. Use of the sound impact from a train travelling twice as fast (20 mph) as the current speed in the corridor understates the current noise level (from freight), thereby minimizing the impact and differential from the LRT trains.

Regardless of whether the residences are impacted by vibration from the tunnels or from the noise which is flagged as a "Residential Annoyance" in the tables in Appendix H, the fact that these "annoyances" will occur incessantly — 220 times per day starting at 4 a.m. and continuing to 2 a.m. — means the impact on those residents will be significant and should be considered "severe". This is very unlike the impact of the freight trains: they may in some cases may be louder than the LRT, but there are only one or two of them per day — often not during the night hours — and then they are gone.

Regarding ground-borne vibration and noise, it should be noted that the impacts projected might underestimate real-world impacts, which could be more annoying than assumed. The FDA manual states: <sup>11</sup>

<sup>9</sup> Chapter 7: Basic Ground-Borne Vibration Concepts, 7-9

<sup>10</sup> All of them are Category 2 receivers: "residences and buildings where people normally sleep."

<sup>11</sup> Chapter 7: Basic Ground-Borne Vibration Concepts, 7-6

...the degree of [ground-borne vibration and noise] annoyance cannot always be explained by the magnitude of the vibration alone. In some cases the complaints are associated with measured vibration that is lower than the perception threshold.

#### **SHORT-TERM VIBRATION IMPACTS**

The SDEIS all but ignores construction-related ground-borne noise (vibration) — except for a single, dismissive comment: “Short-term vibration impacts are those that might occur during construction of the LPA while jackhammers, rock drills, and impact pile-drivers are being used.” Within weeks of this writing, impact pile-driving on the former Tryg’s restaurant site in the West Lake Station area caused serious damage to the Loop Calhoun condominiums, as well as some level of damage to the Cedar-Isles Condominiums. The contractor, Trammel Crow, had to halt the project and extract the piles, since going forward was deemed to be catastrophic. Yet, the pile driving entailed in building the SWLRT tunnel would take place much closer to these and other condominiums, duplexes and apartment houses. The Trammel Crow incident seems to strongly predict a risk of significant construction-related damage to the homes of hundreds of people who live along the corridor where impact pile driving for SWLRT is planned. The SDEIS does not address this problem.

Furthermore, the recent Met Council sewer project completed in this area caused damage to homes located beyond the “expected” range of distance from construction. Residents who attempted to get compensation for the damage were often told by the Met Council to take the matter up with their own insurance companies rather than through the contractors whose work caused the damage. A specific liability plan and budget should be included in the SWLRT project cost estimates. There is a “contingency” line item in the budget, but it should be reserved for genuinely unpredictable costs that arise during the construction, and not for costs that could be, should be, and even are anticipated.

Construction-related vibration impacts could well extend beyond the construction period itself. Damage incurred during construction may not be initially apparent, and could show up months or even years later. Further study is needed of:

- 1) The effects of various pile-driving alternatives on the many at-risk structures
- 2) The costs involved with each of those alternatives;
- 3) The geology of the area, and its ability to support the construction process.

#### **MITIGATION**

The SDEIS promises mitigation of a number of vibration problems. However, the failure of Met Council mitigation measures taken to address LRT problems experienced by the University of Minnesota and Minnesota Public Radio cast abundant doubt on whether they will be effective here.

*With respect to the vibration mitigation (to be further detailed in the Final DEIS), the measures suggested in Appendix H appear to be inapplicable to the many residences that would be affected.* The SDEIS describes isolated tables and floating floors. It’s hard to imagine a retrofit of the residences impacted by the vibration affects utilizing “floating floors.” If this is the intent of the mitigation planned for the SWLRT, a cost estimate of the retrofit of all the residences should be included in the Final DEIS.

#### **3.4.2.5 Hazardous and Contaminated Materials**

Long-term Direct and Indirect Hazardous and Contaminated Materials Impacts

- Permanent pumping of contaminated groundwater
- Impacts of disturbance of dangers in soils that may have long term health impacts on children and vulnerable adults
- Not covered in the SDEIS is the co-location of SWLRT in close proximity to hazardous and explosive materials being carried by the railroad.

#### **SHORT TERM**

The DEIS called for Phase I ESA to be completed, and it was completed in August 2013. It was not made public by the Met Council until May 19, 2015, and indicates many potentially hazardous and contaminated sites along the alignment. It is reasonable to expect to encounter extensive contamination in the Kenilworth Corridor. In addition to being home to several railroad tracks, the Kenilworth Corridor was home to a maintenance yard, blacksmith and boiler shops, a diesel shop and a 90,000-gallon fuel

storage facility. In addition, the land was used as a dump — a common practice of the time, and it is likely that arsenic will be among the dangers encountered, requiring special remediation.

The Phase II Environmental Site Assessment (ESA) is said to be near completion; the report must be made available for public review and comment as soon as it is available. The SDEIS says it is “reasonable to expect that previously undocumented soil or groundwater contamination may be encountered during construction.” It is unclear if any findings in the Phase II ESA have been incorporated into the cost increase recently made public.

The cost of such remediation is unknown and has not been included in the cost estimates. Several sections of the alignment have been designated part of the MPCA Brownfields Program. In the best-case scenario, they will not require much remediation; in the worst case, they will become a Superfund site, requiring significant and expensive remediation.

We attempted to receive budget information that would indicate what amount of the increase in the budget from \$1.65 billion to \$1.99 billion was earmarked for remediation in this corridor. However, the SW Project Office provided only the highest, most general, level of information, claiming that they do not track the line items for things like soil remediation on a segment-by-segment basis, but only in total for the project.

We believe that remediation will require a Construction Contingency Plan above and beyond the general Contingency budget line item. The cost of such a Contingency Plan for Remediation should be included in the project budget.

### **3.4.3 Economic Effects**

#### **Long-Term Direct and Indirect Economic Impacts**

Comment: LRT Done Right disputes the statement that SWLRT will positively impact property values, especially around the 21<sup>st</sup> Street station and Channel. The current freight alignment in the Kenilworth Corridor is already a negative and permanent defect affecting the value of properties along the line, one that would only be magnified by co-location of SWLRT. This is precisely why some residents argued against co-location. The threat of a collision and derailment — such incidents are gaining increased attention in the news media — will in all likelihood increase the scrutiny of buyers as they evaluate the Kenilworth area as an investment and home for their families. Further, the increased noise, vibration, and (nighttime) light from SWLRT, without the previously promised removal of freight rail, would exponentially increase aesthetic disturbance in a neighborhood that until now has been desirable for its park-like feel and up-north atmosphere. The increased adverse effects of co-location will represent a permanent defect to homes within earshot and sight of the line; based on the audible sounds of the current freight line, auditory adverse effects would reach as far as Lake of the Isles Parkway, but those sounds would no longer be the low rumble of freight, but a much more disruptive cacophony of bells and horns.

Further, while studies such as [rtd-fastracks.com](http://rtd-fastracks.com) and others show that access to light rail can increase property values in areas of high density, especially in transient (apartment-filled), younger, urban neighborhoods, the area around the Kenilworth corridor does not wholly represent those attributes. The study mentioned, among others, shows that higher income and low-density neighborhoods, which also comprise this neighborhood, do not experience the same positive impact on property values and rentals as do lower-to-middle-income neighborhoods where public transit is more generally used.

While the Met Council’s 1,600 rides-per-day estimate is unrealistic and unsubstantiated, there will nonetheless be an adverse impact from those who do park in the neighborhood to access the station, resulting in residents closest to the station losing street parking in front of their homes. This would be a disincentive to potential buyers, and negatively impact home values.

We do not support changing the character of the neighborhood with dense development (with the exception of the West Lake Station area, assuming that land is available). Such development would not be feasible on any meaningful scale due to the mature and stable nature of the neighborhood and minimal available free space. Development would denigrate the existing green space in the corridor, especially around the 21<sup>st</sup> Street station, which is the access point for the beach and trail access for the neighborhood.

We believe the negative economic impact on the entire “brand” of the City of Minneapolis incurred by running a divisive, noisy, and environmentally unsound line through one of the crown jewels of “The City of Lakes” park area will forever have a negative



impact on tourism as LRT will disturb the current serenity of the channel, lagoon and lake. The larger, oppressive, industrial-scale bridge will downgrade the experience currently enjoyed by kayakers, walkers, bikers, etc., and cause tourists to leave the city to obtain that natural experience they once enjoyed in Minneapolis.

Finally, we have identified a number of issues not recognized in the SDEIS that will require, by our calculation, initially at least \$13 million to \$24 million of investment above and beyond the projected \$1.65 billion budget goal, and additional costs in perpetuity.

- *\$1 million to \$5 million* — For permanent dewatering of contaminated soils; this will require an extra sewer line in Kenilworth. The City of Minneapolis will need to approve this, since it owns the sewer. The city did not approve this for the 1800 Lake building and went to court over it; would they approve it, on a much larger scale, for SWLRT?
- *\$5 million to \$10 million*: For polluted soil removals. Known polluted soil conditions will require mitigation of thousands of tons of soil, but since the extent of pollution is unknown, the cost may be much higher. This cost will likely be in the millions for Kenilworth section alone; MPCA will need to approve and may add scope/cost.
- *Unknown millions*: For construction-related damage to existing buildings, including possible buy-out of impacted buildings. We understand that there is no way to guarantee that the Calhoun Isles Condominium towers will not be damaged by construction beneath their foundations. What is the current value of these condos?
- *\$3 million to \$5 million*: For relocation of existing sewer force main, pump station, ongoing operational costs of a new pump station.
- *\$4 million annually*: In lost property tax revenues. Approximately \$2 billion of the City of Minneapolis' net \$35 billion tax base is located within 1,000 feet of the Kenilworth Corridor. Most of this \$2 billion is commercial property taxed at 4 percent of value and some is from some of the city's highest-priced homes. Annual taxes from these properties are about \$80,000,000. A decline of just 5 percent in property tax value in this area would equate to an annual loss of \$4,000,000 per year to the City of Minneapolis. Forever. The Met Council would be clobbering one of the golden geese that currently supports Minneapolis Equity Transfer Payments. This area is built out already and limited by zoning from growing further, so there is no net benefit to the city if there is no new growth.

We therefore dispute and challenge the SDEIS statement that mitigation for economic impacts is not warranted for the Kenilworth Corridor, particularly in the absence of any plausible property impact study.

#### **3.4.4.2 Roadway and Traffic**

Comment: LRT Done Right is concerned about emergency access being reduced 12 times per hour to East Cedar Lake Beach and the residences on Upton Avenue S. The freight train, which was originally to be removed, coupled with the light rail line, will exponentially impair access further. We see no possible way to mitigate this impact even beyond the measures that are mentioned in the SDEIS.

#### **3.4.4.3 Parking**

Comment: LRT Done Right is concerned that there is complete disregard in the SDEIS for the impairment of on street parking availability in its neighborhoods for residents and their guests. as well as emergency access to those homes, especially in winter when streets are narrowed. LRTDR strongly opposes any park and ride lots as that would significantly impair the parklands and would not be compliant with Minneapolis city policy.

#### **3.4.4.4 Freight Rail**

##### **A. Existing Conditions**

Comment: It is very troubling that, contrary to all previous planning, the SDEIS now claims that the need "to develop and maintain a balanced economically competitive multimodal freight rail system" as a justification for the Southwest light rail project (page 1-1). With little public awareness of this new "need," the project has morphed so that approximately \$200 million in local and federal *transit* dollars will be used to improve *freight* rail.

In 1998, when freight was reintroduced to the Kenilworth Corridor, freight was to be a temporary alignment until light rail could be built. All along, this promise was made to the City of Minneapolis, the Cedar Isles Dean neighborhood, the Kenwood neighborhood, and others as a basis for agreement to the project. That none of the responsible parties, including elected officials who are still deeply involved in the SWLRT planning process, secured appropriate legal documentation of this agreement at the time is beyond disturbing.

The 2005-2007 Alternatives Analysis assumed that "freight would be relocated to make way for light rail." Since freight was not taken into account at this stage, neither Hennepin County nor the Met Council conducted an honest and realistic analysis of alternative ways to serve the southwest suburbs' transit needs. The financial, political, and environmental costs of addressing freight rail in the Kenilworth Corridor were not considered.

When the Locally Preferred Alternative (LPA) was selected in 2009-2010 under the assumption that freight rail would be relocated and that LRT would run at-grade in Kenilworth, the costs and concerns of freight relocation were again not addressed.

The Project Scoping Report for the 2012 Draft Environmental Impact Statement said clearly, "Freight Rail is independent of the Study." Although the Federal Transit Administration (FTA) noted this erroneous assumption when it approved preliminary engineering, neither Hennepin County nor Met Council ever amended the project scope to include freight rail.

The Municipal Consent process was designed so that once a project's elements and impacts are known, public officials can make informed decisions. However, since freight co-location with LRT and tunneling were never part of the original LPA and subsequent DEIS, the City of Minneapolis was pushed in 2014, under threat of project cancellation, to grant municipal consent without foreknowledge of the risks to both community and environmental safety.

Now this SDEIS is similarly devoid of important human and environmental safety information around co-location of freight and SWLRT. It is remarkable more for what is **not** included than what is included. Substantive issues remain unexamined, especially in Sections 3.4.4.4 (Freight Rail) and 3.4.4.6 (Safety and Security). The SDEIS only addresses the effects of LRT on freight rail (mostly economic impacts to minimize time lags on freight during construction), not the environmental and safety effects of co-location of freight and light rail through the corridor. It says nothing about substantive safety concerns of co-locating high-hazard freight feet from LRT construction and LRT trains in operation.

**Kenilworth — and the SWLRT with co-location — is in the “Blast Zone.”**



Nationwide, communities are becoming increasingly aware of high hazard freight – often referred to as “bomb trains” — operating in their midst. High-hazard trains have long run through our towns and cities, but never with the frequency nor the amount of dangerous materials now being hauled. Running such trains through any populous areas is undesirable and puts many human lives within a “blast zone,” running 1/4-1/2 mile on either side of the track.

**The Kenilworth corridor is a high-risk evacuation blast zone.**



Below are two representations of the Blast Zone. The map applies the definition of the Blast Zone, as commonly defined by many national groups with interest in the issue, and the chart depicts the number of residents in the blast zone. Each green circle represents 100 residents.

## - THIS IS THE BLAST ZONE -

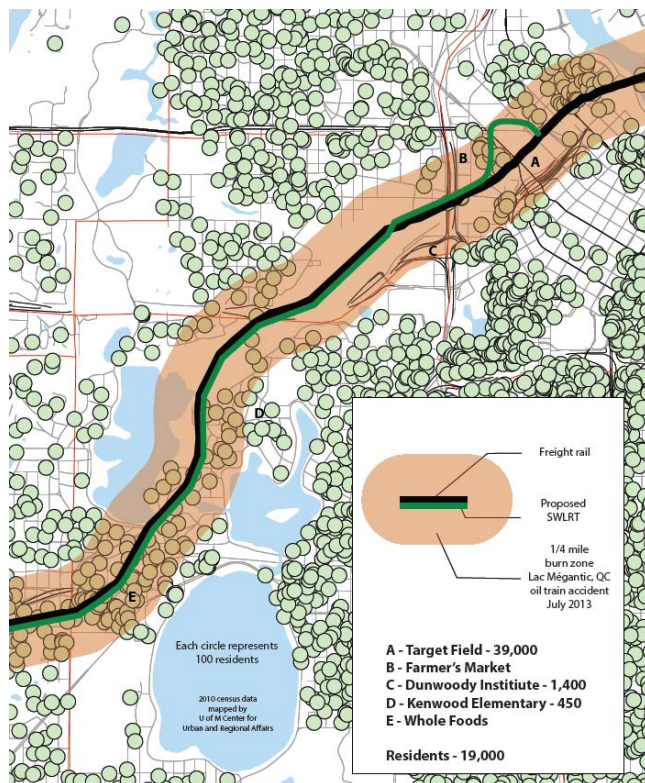
SWLRT co-location with high hazard freight trains  
in the Kenilworth corridor



Ethanol and Oil Train Disasters:



**Population density map of the Blast Zone – Kenilworth Corridor. Please note that the blast zone includes Target Field.**



Comment: Freight railroads have radically changed since the reintroduction of freight into the Kenilworth Corridor. The federal mandates on ethanol, the running of unit trains carrying single high-hazard products, and the use of much longer trains have increased freight safety concerns. The privately owned TC&W is currently the only freight company that is allowed to take trains through the corridor, but it can connect to any other carrier and currently partners with Canadian Pacific to carry its products through Kenilworth. Federal rail policy requires that the interests of freight rail operators and shippers be considered in the development of passenger rail service.

In order to provide elected officials, policy makers, and members of the public with current, factual, and supportable information about the impact of TC&W and its operations, TC&W commissioned a study in 2013. According to this report by Klas Robinson,<sup>12</sup> "TC&W provides rail service to numerous companies in Minnesota and neighboring South Dakota, hauling such diverse products as corn, soybeans, wheat, sugar, vegetables, ethanol, crushed rock, metals, plastics, potash, fuel oil, distillers oil, machinery, lumber, manufactured goods, propane and fertilizer, including anhydrous ammonia." Ethanol, propane, fuel oil and fertilizers are all high-hazard products. Distiller's oil and potash are also *flammables*. Exposure to even small amounts of anhydrous ammonia

<sup>12</sup> *Economic Impact of TC&W Railroad's Freight Operations*, September 2013; <http://tcwr.net/wp-content/uploads/2013/10/TCW-Impact-Final>.

can cause serious burning of the eyes, nose, and throat. Exposure to higher levels causes coughing or choking and can cause death from a swollen throat or from chemical burns to the lungs. A single tanker car of anhydrous ammonia can put hundreds or even thousands of area residents at risk in case of derailment and breach.

Through 2012, the report says, “customers of Twin Cities & Western Railroad Company and its affiliates shipped more than 23,400 cars, including almost 17,700 cars on TC&W and over another 5,700 cars on a short line railroad that uses TC&W to reach the Twin Cities.” That number continues to expand annually, with “the number of monthly cars shipped on TC&W during the first four months of 2013 significantly higher than for the same periods in each of the three prior years — almost twice that of first quarter 2012 (94.0 percent greater), almost 40.0 percent higher than first quarter 2011 and 70.0 percent greater than first quarter 2010.” As the economy continues to improve since the recession of 2008, we can expect that the number of train cars and the frequency of trains will increase. According to the Minnesota Department of Agriculture, between 2000 and 2011, ethanol production in Minnesota increased by over 5 times and each subsequent year has continued this trend. With the nation-wide federal mandate to increase ethanol in gas to 20 percent, we can also expect the production and transport of these high-hazard products through the corridor to increase dramatically. It is clear that the TC&W that was temporarily reintroduced in the corridor in 1998 is not the TC&W that runs through the corridor now.

According to TC&W, they “have Class I rail connections to Canadian Pacific, Union Pacific, BNSF Railway and Canadian National, reaching markets in 39 U.S. states, seven Canadian provinces and four Mexican states.” Their network would potentially allow them to carry anything including nuclear products, Bakken Oil, anhydrous ammonia, chlorine, and other hazardous freight. Common Carrier freight legislation requires that shippers (currently TC&W and CP) carry anything that their customers demand. Additionally, *at any point TC&W could sell their company to one of the major railroads*, such as BNSF, which could generate 10 times as much traffic and introduce exponentially more hazardous materials into the corridor. *Making freight rail permanent in Kenilworth increases the chance that this will happen.*

The Pipeline Hazardous Materials Safety Administration (PHMSA) controls the safety of freight trains. Historically, PHMSA standards have been lax, prioritizing commerce over safety and the environment. Recently, after public pressure, PHMSA has toughened safety standards for most railroads. ***Please see LRT Done Right's prior correspondence on this matter at the end of this response, starting on page 38.***

However, TC&W, which is a Class III rail carrier (a short line with lower revenues), has been and continues to be exempted from certain safety standards that guide more profitable and larger Class I and II railroads. Ethanol is carried in DOT-111s and this type of car will not be banned, according to PHMSA for another 5-7 years. Railroads have lobbied heavily to remove current and future regulations on them to maximize their profits, including recently passed braking mechanisms on the hazardous cars. They have lobbied to go from two-person crews to one- or two-person crews. A single-person crew would reduce safety due to overload, fatigue, etc. And railroads have fought to delay the introduction of safer double-hulled tanker cars and to continue to carry their hazardous cargo in dangerous substandard DOT-111 freight tanker cars. Freight infrastructure has suffered, and nearly all derailments are due to substandard equipment, track failure or operator error. Some new PHMSA standards that attempt to improve safety of hazardous freight *may not even apply to TC&W due to their Class III status*. Class III railroads also have less money to invest in infrastructure, and it is clear that this railroad has infrastructure issues, experiencing a derailment in 2010. Despite replacement of rails to single-weld track in 2012, TC&W still suffers from infrastructure issues, like rotting cross ties, missing rail plates and the missing rail spikes that hold the rails in place. From May 2015 to July 2015, deep potholes have bordered the track at the Cedar Lake Parkway crossing, and have gone unfixed despite calls to TC&W and MNDOT.

The mix of commodities that TC&W carries has changed over time, with approximately 30 percent of TC&W's freight being ethanol. It has only been in the last 5 to 10 years that unit trains of a single commodity have been a common occurrence. Prior to that, manifest trains, carrying a variety of commodities were much more common. *Unit trains of 100 cars of ethanol*, a highly flammable product, now frequently traverse the corridor. Through the planning process, the Met Council repeatedly told members of the public that the primary products carried by freight through Kenilworth were agricultural — which sounds innocuous enough. But while ethanol may be an agricultural product, it is hardly innocuous. According to Karl Alexy of the FRA, ethanol is more dangerous than most crude oils, with a lower ignition point, and higher explosive potential. Its Hazard Packing Group rating (II) is higher than most crude oil (because of its explosive potential). With respect to oil, only Bakken Crude matches its danger due to the high level of byproducts added to Bakken oil and its consequent instability. Ethanol burns hot enough (3,488 degrees F) to melt steel structures. The freight through Kenilworth currently runs only feet from bridges and mere inches from a high-rise condominium that would be vulnerable in the case of a derailment.

The Freight Rail Administration (FRA) estimates that there will be at least 10 to 20 oil or ethanol derailments per year going forward. Nationwide, we had over 7,000 train derailments of some kind in 2014. *These concerns are not just theoretical.*

Further, *we strongly object to the Met Council requesting that the FRA abdicate its jurisdiction over freight rail* in the Kenilworth Corridor and elsewhere along the SWLRT line. The Met Council has requested waivers from the FRA to put jurisdiction of the co-located corridor under FTA. We have no evidence that the Met Council or the FTA are qualified to oversee the combination of LRT and freight rail in the same corridor, particularly in such close proximity. We are extremely concerned that the FRA may be relinquishing its jurisdiction, except for five named at-grade crossings where both freight and LRT cross together, and even here the Met Council could apply for a crossing waiver.

The existence of freight alone is of great concern to residents and users of the Kenilworth Corridor. The construction of SWLRT running right next to high hazard freight is alarming. *None of these facts or concerns is reflected in the current SDEIS.*

## **B. Potential Freight Rail Impacts**

### **Long-term direct and Indirect Freight Rail Impacts**

*For reference to LRT Done Right's commitment to freight safety in the Kenilworth Corridor, please see the addendum at the end of this response.*

Comment: Hazardous freight has become a nationwide problem. By choosing to co-locate freight and light rail, despite all previous planning, the Met Council is choosing to exacerbate this problem in the Kenilworth Corridor. The addition of LRT to a corridor that does not meet the minimum American Railway Engineering and Maintenance-of-Way Association (AREMA) safety guidelines of a 25-foot separation center-to-center rail is shockingly unsound. In fact, AREMA now recommends a 200-foot separation as optimal. Although narrow corridors that contain both freight and passenger trains and do not meet minimum safety standards currently exist in parts of our country, an increasing awareness of freight dangers has meant that going forward, communities are much more exacting with regard to safety standards and meeting minimum AREMA guidelines. In fact, we can find no other project currently under construction that won't meet at least the minimum 25-foot grade separations. *The SWLRT project does not meet current AREMA best practices.*

The many risks of running freight next to LRT are unmentioned in the SDEIS, even though we know that the majority of freight or LRT derailments are either track failures or operator error. There is nothing in the SDEIS that deals with an *evaluation of risk or readiness of dealing with a derailment*, especially of a high-hazard product.

LRT catenary wires that regularly spark off the pantographs will run in some places 10 to 15 feet from freight trains. In 2014 alone, FRA reported 43 "accidents" in the United States related to pantographs. There was one in St. Paul within the last few months. Even with the eventual placement of crash walls, catenary electrification would run immediately adjacent to highly flammable unit trains (80 to 125 tanker cars) of ethanol. Ethanol is vulnerable to ignition by electrostatic charges and has a higher ignitability than most forms of crude oil. Vents at the top of ethanol tanker cars will run close to those electric wires.

TC&W and C&P trains use DOT-111 tanker cars. These trains regularly traverse the Kenilworth Corridor carrying ethanol, fuel oil, propane, fertilizers (including anhydrous ammonia), distillers' oil, and potash. These old-generation tanker cars have single hulls prone to thermal tears and punctures, and leaky valves. They are more likely to tear or puncture than newer generation replacements like the double-hulled DOT 117s. The National Transportation Safety Board (NTSB) discovered problems 24 years ago with DOT-111 tankers but USDOT did nothing. In 2012, the NTSB called for an immediate ban on using these tank cars to ship high-hazard products like ethanol and crude oil because they are prone to punctures, spills, fires, and explosions in train derailments. Two in three tank cars used to transport crude oil and ethanol in the U.S. are DOT-111s, yet the DOT has taken no action beyond issuing a safety advisory urging shippers to use the safest tank cars in their fleets to the extent feasible. Only recently has PHMSA come out with new regulations to replace these dangerous tankers over a six-year time period. Loopholes exist in the regulations, however, making it all but certain that single-hulled DOT-111s trains will continue through Kenilworth for years to come.

Another serious concern with freight is the misclassification of rail cars. PHMSA first launched Operation Classification in the summer of 2013, in response to increased activity in the Bakken region. Initial testing has revealed that 61 percent of high-

hazard oil was misclassified. Sometimes the train manifest may not actually reflect what being transported by the freight. The extent of misclassification of TC&W's rail cars is not currently known.

According to the Department of Homeland Security, high-hazard train tankers are vulnerable to terroristic threats. The proposed electrically-powered SWLRT would run adjacent to ethanol-bearing freight through St. Louis Park and the Kenilworth Corridor all the way into downtown. Around the area of Dunwoody, the TC&W tracks merge with those of BNSF tracks, which have been documented as carrying crude oil.<sup>13</sup> Farther on, the freight trains (some carrying ethanol and some carrying Bakken crude oil) join LRT and Northstar Commuter rail in tri-location, until they stop at the Target Station. Thus, while ethanol and crude oil trains already represent risks to Twins Stadium and Target Station, the addition of LRT would expose even more people to potential danger.

The Department of Homeland Security identifies places like the Twins Stadium and the Target Station as high-value targets vulnerable to terrorism. The co-location of freight and passenger trains carrying 10,000 thousand tons of highly combustible products underneath the Twins Stadium and to the Target station is a disaster that can and should be prevented. Were high-hazard freight not running through this corridor, as was originally envisioned with relocation of freight, then the concerns of terrorism would be diminished. However, tri-location of high hazard freight, Northstar commuter trains and SWLRT near to and underneath the Twins Stadium to the Target Station is planning gone awry. If we believe that terror groups are unaware of these high value target vulnerabilities in our system, we are likely sadly mistaken. Regarding the multiplicative risks and risk readiness related to tri-location of high-hazard freight, Northstar, and SWLRT under the Twins Stadium and to the Target Station, the SDEIS contains no acknowledgement.

In fact, even after a multitude of concerns were raised by the City of St. Louis Park and its residents in response to the relocation of freight proposed the 2012 DEIS, *the current SDEIS does not contain one word acknowledging high-hazard freight through Kenilworth*. There is evidently no safety plan should an ethanol or other hazardous materials freight derailment to occur, and no containment and recovery planning should a disaster encroach on the tunnel and/or spill in to the Minneapolis Chain of Lakes.

Hennepin County, the Met Council and the State of Minnesota have little power going forward in determining whether or not TC&W's model of business changes in ways that would increase risk. They also have no ability to intervene if TC&W should choose to sell. These risks to the Kenilworth area are only likely to increase as federal mandates to increase the mix of ethanol from 10 percent to 20 percent in gasoline mixtures are initiated. TC&W could choose to sell, likely to BNSF, likely increasing the frequency and length of trains in this corridor and transportation of an even greater mix of hazardous chemicals.

Currently, TC&W reports that trains go 10 miles per hour through the Kenilworth Corridor, but this is voluntary, not mandated. Going forward, the company may choose to sell to a company that does not respect this speed limit or TC&W may decide to increase speeds. The necessity of slow freight (even beyond the LRT construction period) is critical in an urban recreational corridor and *a long-term enforceable agreement with the freight operator and the Hennepin County Regional Rail Authority should be considered as part of this project*.

Further, heavy freight causes vibrations that travel through the ground. The ground substructures affect vibrations, with waterlogged soils tending to increase those vibrations. We see no evidence that the potential for long-term damage to LRT structures from vibrations of heavy freight – and the related long-term costs in terms of maintenance dollars and human safety – have been considered. Potential damage to residences and other buildings from freight vibrations is also ignored in this SDEIS.

Finally, the SDEIS does not explore Met Council liability if SWLRT or freight derail or otherwise cause damage or harm. Currently, freight companies carry limited liability that only covers their rolling stock and train infrastructure. In light of the catastrophic potential of any accident in the Kenilworth Corridor, *this insurance liability assessment should be done* prior to building SWLRT, then made public and included in construction and operating cost estimates.

### Short-Term Freight Rail Impacts

Comment: During construction, the dangers to the community will be exacerbated due to the fact that freight, particularly freight carrying hazardous materials, will continue through the corridor.

<sup>13</sup> Photos taken on 7/21/15 of a BNSF train in this segment of the route, before and after it merges with the TC&W route, show cars bearing 1267 petroleum crude oil DOT placards; presumably these cars are carrying Bakken crude.



First, it's not clear that there is room in corridor for the construction plan as described. While we've seen various calculations of the corridor's narrowest point, our understanding is that it measures 59 feet. This point is located between the historic grain elevators – the Calhoun Isles Condominiums – on the east and the Cedar Shores town homes to the west. The SDEIS states that the freight tracks will be moved 2 to 3 feet closer to the town homes. The tunnel trench (35 feet wide) will be dug at the base of the Calhoun Isles Condominiums about 18 inches from its footings. There will be a buffer between town homes to the east of 22 to 24 feet; the freight train is about eight feet wide. Thus: 35 feet trench + 2 feet from condos + 24 feet from town homes + 8-foot wide freight train = 69 feet — to fit into a 59-foot pinch-point. This math does not inspire confidence in the safety of the construction plan.

During construction, freight will run through a construction zone with construction workers and debris with **no crash walls** at the edge of a 35-foot construction trench. It will continue to carry high-hazard freight including ethanol, fuel oil, and fertilizer. (Under common carrier obligation, TC&W or CP must carry whatever else their shippers ask them to carry and we may or may not know what these trains are actually hauling.) "Bomb trains" will travel at the edge of a construction pit that will take two years to complete. Even with the precautions suggested in the SDEIS, a derailment is far from unimaginable in this scenario. The proximity of the condominiums and town homes puts hundreds of people at risk for devastating consequences.

It is also important to note that the current poor condition of freight rail infrastructure increases the risk for a short-term freight derailment both during and after construction. A recent obvious example: From late May through July 2015, two pot holes immediately next to the rail at the Cedar Lake Parkway freight crossing measuring as deep as 6 inches have remained unfilled despite being reported to DOT and to TC&W. In 2010, there was a derailment in the neighborhood of a TC&W train; Hennepin County replaced the track through Kenilworth with a safer single-weld track. However, rotted freight ties were not replaced at that time, nor were rail plates and spikes uniformly repaired. Currently, there are rail ties that are completely rotted out, missing rail plates that hold the ties to the rails and many missing rail spikes. That these were not repaired when the rail was replaced indicates poor maintenance and raises concerns about the competence that Hennepin County and the Met Council will bring to the co-location element of the SWLRT project.

Construction debris in the corridor will heighten the risk of derailments. Derailments are caused by operator error or track failures, including track impediments. Construction can displace the supporting structures that bolster rail, and although engineers can try to bolster the structures through shoring, there will be nothing to stop a train if it begins to tip into the construction pit. Tip guardrails have been suggested as a solution (not in this SDEIS), but these can build up with snow and actually cause derailments.

Nighttime running of freight (also not considered in the SDEIS) will be perhaps even more dangerous than daytime. Construction debris may be left near or on tracks and may not be visible to the freight engineer at night. Final day inspection of track is imperfect and human error could easily miss track impediments.

Inclement weather like snow may mask destabilization of freight infrastructure, and rain could wash out the surrounding already disturbed soils, increasing the derailment risk during construction. While this is true under any construction scenario, the risk multiplies with freight running next to the tunnel construction pit.

If a derailment were to occur during construction, access to fire safety equipment is extremely limited because of the nature of the corridor: in some places, the only access is between people's homes and/or through their driveways. In the event of a derailment occurring during construction, the only access for fire trucks may be from West Lake Station, 21<sup>st</sup> Street or Cedar Lake Parkway. Fire equipment must be accessible in case of a derailment emergency, and in-depth coordination among the fire department, the Met Council, and the citizens has not been attempted or even mentioned in this SDEIS.

In case of any chemical freight derailment, chemical fires must be fought with specialized foam products, usually foam specific to the chemical spill. These fires cannot be fought with water, which can actually spread a chemical fire. Water can be used to cool rail cars that have not ignited, but foam is necessary to put them out. Limited foam is available at local fire stations, but our understanding is that it can take 2 hours or longer to access the necessary quantity of foam to fight a chemical derailment fire.

Currently, TC&W reports that trains go 10 miles per hour through the Kenilworth Corridor, but this is voluntary, not mandated. Going forward, the company may choose to sell their company or increase that speed. The necessity of slow freight even without LRT construction is critical, but with construction the danger becomes critical at any speed.

According to TC&W president Mark Wegman, there had only been one meeting as of June 2015 (i.e., in preparation for the SDEIS) with SWLRT project staff to discuss issues of joint construction concern. This seems shortsighted. Our community expects more than superficial consideration of these serious construction-related concerns prior to decisions about the feasibility of moving forward with the SWLRT project.

Finally, the SDEIS does not explore Met Council liability either during or following construction if SWLRT or freight derails causing a train catastrophe. Currently, freight companies carry limited liability that only covers their rolling stock and train infrastructure. This assessment should be completed and made public prior to SWLRT construction.

### **C. Mitigation Measures**

Comment: It is difficult to respond to this section surrounding freight since no problems with co-location have even been acknowledged in the SDEIS. There is no real analysis of the effects of co-location and the danger of running high-hazard freight through the Kenilworth Corridor both during and after construction, and in an area that does not meet minimum AREMA guidelines, let alone best practices. This SDEIS is astounding more for what it does not contain than what it does. The mitigation proposed concerns only making sure that the freight schedule is unimpeded; it ignores concerns about the safety of neighborhood residents, construction and freight personnel, park and trail users, or future SWLRT riders.

Minimally, during construction, high-hazard freight MUST be diverted from the corridor. Long term, crash walls between freight and LRT are critical. In the short term, without crash walls, ALL hazardous or flammable freight should be rerouted out of the corridor until proper safety crash walls are present. The idea of running high hazard freight during construction at the edge of a construction trench without crash walls is extremely concerning.

The treatment of freight rail in this SDEIS indicates that the Met Council is not even aware of the danger to area residents, waterways, parks, trails, or SWLRT passengers. The many issues related to making freight rail permanent in the Kenilworth Corridor and co-locating freight and light rail need much greater study and consideration before this project advances.

#### 3.4.4.5 Bicycle and Pedestrian

**Because there would be no long-term adverse impacts from the LPA on bicycle and pedestrian facilities, no long-term mitigation measures have been identified. Short-term effects on pedestrian and bicycle routes will be mitigated through signage, information fliers, website postings with maps of construction areas/detours, and notices placed at bicycle shops, for example.**

Comment: At last measure, our understanding is the trails receive 600,000 discrete unique visits per year and those visits to current parkland are enhanced by the current “north woods” feel of the area, and that experience would be significantly impaired by the addition of light rail. This includes an expectation of natural quiet conditions. Pedestrians do not pass quickly through the park-like environment and will therefore be significantly impacted by added noise, movement and infrastructure of the LRT and freight rail. The speed joined with the noise at close proximity greatly detracts from the trail experience for both bicyclists and pedestrians, and can even be frightening to users.



#### 3.4.4.6 Safety and Security

##### LONG-TERM IMPACTS

Comment: The current plan to co-locate freight and LRT within the same corridor — within a dozen feet of each other in certain places — creates new, potentially catastrophic hazards. It is currently proposed that the freight train (which carries volatile and explosive ethanol on a daily basis, and several unit trains of ethanol per month) remain permanently in the Kenilworth Corridor. The addition of the SWLRT with its electrical power wires only a few feet away exacerbates the existing danger of ethanol in the corridor. Current safety standards recommend against co-location in such close proximity when there are alternatives; other alternatives for this SWLRT alignment must be explored.

Furthermore, in the event of an explosion of ethanol trains along this corridor, we understand that the foam retardant required to extinguish the fire is “within a 3 hour distance” of the corridor. We believe that the potential harm during that “3 hour window” along with permanent damage to residences and residents should be quantified. Should an explosion occur during the passing of an LRT train, the potential exists for loss of life or harm to those exposed to the hazardous fumes.

Please note that the Minneapolis Park Police also provide service within the study area. KIAA requests that the MPRB Police be consulted on security issues related to the impact of a proposed station at 21<sup>st</sup> Street on East Cedar Lake Beach (Hidden Beach) and their input be incorporated into final design plans. In the summer of 2012, Hidden Beach generated more police actions than any other park in the MPRB system. For the last five years, KIAA has provided supplementary funding to the Park Police to allow

for increased patrols in this area. The neighborhood has expressed grave concern that an inadequately managed station would increase opportunities for illegal behavior.

### SHORT-TERM IMPACTS

Currently, rush hour traffic produces daily gridlock that sometimes extends from Lake Street, along Dean Parkway, Cedar Lake Parkway, Wirth Parkway, and Wayzata Boulevard (frontage road along I-394) all the way to the Penn Avenue Bridge. (This situation existed even before the construction at Highway 100 in St. Louis Park.) The closing of a critical crossing (Cedar Lake Parkway at the Kenilworth Trail) would be necessary during the construction of the proposed tunnel from West Lake Street to just past Cedar Lake Parkway. Affected neighborhoods already have limited entry and exit points.

The SDEIS does not address the need to ensure reasonable transportation options during this period, including routes for emergency vehicle access. There must be plans for fire and ambulance routes in the affected neighborhoods. Travel time for emergency vehicles would be increased during that closing. The SDEIS describes such delays as “minor”; we take vigorous issue with such a demotion of safety concerns, as even two minutes could be the difference between life and death, or a home being saved from fire or destroyed. (On June 11, 2015, an accident at Dean Parkway and Lake Street slowed traffic on Dean Parkway to a crawl for over an hour.)

Also missing is information on what measures, including evacuation plans, would be necessary to protect the Cedar Shores townhomes when the TC&W trains, with their explosive freight, are moved several feet closer to them during construction. Our neighborhoods were recently impacted for upwards of a year by a Met Council sewer-replacement project, with road closures (of which we were frequently not informed) and detours. As noted earlier, we understand that the sewer project would need to be re-done as part of the SWLRT tunnel-construction.

### 3.5 Draft Section Evaluation Update

Comment: The SDEIS is almost incomprehensibly dense and convoluted as it discusses the application of Section 4(f) to the LPA. For the benefit of the reader, the Section 4(f) statutory mandate is clear:

“Section 4(f) protects publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance and historic sites of national, state, or local significance from use by transportation projects. These properties may only be used if there is no prudent or feasible alternative for their use and the program or project encompasses all possible planning to minimize harm resulting from its use. If transportation use of a Section 4(f) property results in a *de minimis* impact, analysis of avoidance alternatives is not required.”

Conversely, if there is more than a *de minimis* impact, an analysis of avoidance alternatives is required. Thoughtful analysis of avoidance alternatives is absent from the SDEIS.

A cursory reading of the SDEIS will reveal that there is not a good-faith analysis of prudent or feasible alternatives. “No Build” and “Enhanced Bus Service” were the only two alternatives considered, and only superficially; they were presented to the public in a cursory manner and without documentation. Not surprisingly, neither of them is considered feasible or prudent. Alternatives that *would* likely be considered feasible and prudent, such as a deep tunnel or rerouting, were not considered. Consequently, the bulk of the 4(f) analysis is used to contend that any adverse impact on 4(f) property will be *de minimis*.

These comments will focus almost entirely upon the Kenilworth Channel/Lagoon section of the LPA but are equally applicable to other section 4(f) properties identified by the SDEIS. The FTA, although identifying property subject to Section 4(f), fails throughout to adequately analyze or identify specific mitigation steps that would render impacts *de minimis*.

### The Kenilworth Channel/Lagoon

At page 3-259, referencing the Kenilworth Channel/Lagoon, the SDEIS concludes:

“Through coordination with MPRB to date and based on the design and analysis to date as described in this section, FTA has preliminarily determined that the proposed permanent and temporary uses by the LPA would not adversely affect

the features, attributes or activities that qualify the Kenilworth Channel/Lagoon for Section 4(f) protection. Consistent with the requirements of 23 CFR 774.5(b), FTA is, therefore, proposing a *de minimis* use determination for the LPA at the Kenilworth Channel/Lagoon.

To understand the absurdity of this conclusion, one first should acknowledge that the Kenilworth Channel/Lagoon is one of the most important elements in the Minneapolis Park Board's Chain of Lakes (and also identified as subject to Section 106 because of its historic character). It is primarily appreciated for its pastoral quality and is used by walkers, bikers, kayakers, cross country skiers, ice skaters, fishermen, picnickers, and visual artists.

The FTA's own analysis identifies these activities and elements and acknowledges that the LPA would constitute 4(f) use but then, after an evaluation of the impacts, concludes that the use of the protected land will be *de minimis*. This of course means that there need not be a feasible and prudent alternative analysis.

### Visual Impact

Per the SDEIS, visual impacts to the Kenilworth Channel/Lagoon will be:

1. Removal of two existing and potentially historic wooden bridges
2. Construction of massively larger bridges
3. Modification to topographical features, vegetation and WPA-era retaining walls.

Particularly astonishing is the statement at page 3-254 that the

"horizontal clearances between the banks and the new [bridge] piers would be of sufficient width to accommodate recreational activities that occur within the channel lagoon"!

The same thing could be said about an 8-lane super highway bridge spanning the channel. The point is that the altered scale of the proposed bridges will in fact be jarringly disproportionate to the channel's features. Not a *de minimis* impact by any stretch of the imagination.

The SDEIS goes on to note that the vegetation clearing necessitated by the new bridges would cause some reduction to the "visual quality of the view". But, the document goes on to reassure –

"[T]he bridges as currently conceived would have an attractive design that would become a positive focal point in the view. The overall change to the view's level of visual quality would be low. Because of the recreational activity in the channel, this view is visually sensitive. Even though the view is visually sensitive, because the potential level of change to visual quality will be low the potential visual impact will not be substantial."

Thus the reader is simultaneously warned and reassured that everything will be visually pleasing because a planner's aesthetic judgment about the visual quality of yet-to-be-designed bridges will be "attractive."

### Noise Impact

It gets worse as the FTA pursues *de minimis* findings. The SDEIS acknowledges that two separate areas of the Kenilworth Channel/Lagoon are noise receptors and would be subjected to moderate noise impacts. There is a non-specific undertaking to utilize mitigation measures to reduce the area of Moderate noise impacts closest to the new bridges.

No such undertaking is offered with respect to the northern bank of the lagoon. Instead the SDEIS states:

"The northern bank of the lagoon [section 4(f) property], generally between West Lake of the Isles Parkway and South Upton Avenue (termed the Kenilworth Lagoon Bank in the noise analysis), was classified as a Category 1 land use, with stricter noise impact standards than the Category 3 land use. However, because of the distance between the light rail

tracks and the western point of the Category 1 land use, *noise levels under the LPA at that location would not exceed FTA's Severe or Moderate criteria.*"

Apparently there is not an intent to mitigate noise in this area as legally required.

#### **Not Mentioned**

Completely missing from the 4(f) analysis of the Kenilworth Channel/Lagoon is an analysis of the impacts of vibration and safety.

#### **Minneapolis Park and Recreation Board**

The SDEIS fails to address the previous objections of the MPRB: Instead it attempts to portray the MPRB as a willing partner:

"Through coordination with MPRB to date and based on the design and analysis to date as described in this section, FTA has preliminarily determined that the proposed permanent and temporary uses by the LPA would not adversely affect the features, attributes or activities that qualify the Kenilworth Channel/Lagoon for Section 4(f) protection. Consistent with the requirements of 23 CFR 774.5(b), FTA is, therefore, proposing a *de minimis* use determination for the LPA at the Kenilworth Channel/Lagoon. Supporting this preliminary determination is FTA's expectation that mitigation measures will be incorporated into the project that will avoid adverse effects to the protected activities, features, and attributes of the property. Those measures will be identified through continued coordination with the MPRB, which will continue through preparation of the project's Final Section 4(f) Evaluation. The MPRB must concur in writing with the *de minimis* impact determination after the opportunity for public comment on the preliminary Section 4(f) determination."

Even if the MPRB were to concur with a *de minimis* impact determination, such concurrence would hardly be credible given MPRB's earlier official statements on the topic. For instance, in November of 2012 the MPRB clearly itemized a series of concerns with respect to the selection of the Kenilworth Corridor as the LPA and, specifically, with respect to co-location stated:

"The MPRB opposes the co-location alternative and supports the findings presented in the DEIS regarding Section 4(f) impacts for the co-location alternative. In review of the documents, the loss of parkland described for the co-location alternative *cannot be mitigated within the corridor.*" (emphasis added)

Although the MPRB ultimately entered into a Memorandum of Understanding with the Met Council providing for a consultative role in the design process (March 12, 2015) ("MOU") the MPRB has never agreed that adequate mitigation is possible. Most recently in a letter to the Met Council summarizing its most recent comments about the SDEIS, the MPRB unequivocally concluded:

"Visual quality and noise are key areas of concern for the MPRB. The introduction of LRT in combination with freight rail *poses the potential for significant disturbance* to a corridor that, once disturbed, may [not] realize a restored look for decades."

Although these Park Board statements are encouraging, the objectivity and independence of the MPRB with respect to its "consulting" role is in serious doubt, given the enormous political pressure applied by the Governor and the Met Council via real and documented threats of massive budget retaliation. The Park Board's abdication of protection of 4(f) status followed Governor Mark Dayton's threat to cut \$3 million from its budget — this in retribution for the Park Board's legitimate attempt to protect the channel. The Park Board desperately needed the funds and, to date, has acquiesced to the governor's threat, despite its belief that:

"Visual quality and noise are key areas of concern for the MPRB. The introduction of LRT in combination with freight rail poses the potential for significant disturbance to a corridor that, once disturbed, may [not] realize a restored look for decades."

#### **No-Build or Bus Rapid Transit Alternative**

Although repeated throughout the SDEIS, the following statement is representative of its treatment of 4(f) property:

“No Build Alternative and Enhanced Bus Alternative as evaluated in the Draft EIS are the only full Section 4(f) avoidance alternatives identified to date and neither of them would be prudent because they would not meet the project’s purpose and need.”

This facile and conclusory assertion is entirely inconsistent with well-understood precedent. This analysis falls short of what is required under the law. If the proposed use is not *de minimis*, then alternatives must be evaluated — presumably in good faith.

The Kenilworth Channel/Lagoon is comprised unquestionably by Section 4(f) lands and “are “...not to be lost unless there are truly unusual factors present...or...the cost of community disruption resulting from alternative routes reaches extraordinary magnitudes.” (*Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402 (1972))

Given the impact on 4(f) property, planners are required to evaluate alternatives – alternatives beyond the two choices proffered in the SDEIS – No Build or Bus Rapid Transit. For example there has not been a good faith determination that an adjustment to the proposed SWLRT alignment wouldn’t have the same beneficial purpose, outcome or cost as the current LPA. The law requires a deeper analysis. That such an analysis would result in a delay of the project is not sufficient justification to fail to undertake it. The following guidance from the Department of the Interior *Handbook on Departmental Review of Section 4(f) Evaluations* is instructive:

CEQ regulations, as well as DOT Section 4(f) regulations, require rigorous exploration and objective evaluation of alternative actions that would avoid all use of Section 4(f) areas and that would avoid some or all adverse environmental effects. Analysis of such alternatives, their costs, and the impacts on the 4(f) area should be included in draft NEPA documents.

It is clear that the SDEIS falls far short of this standard and that additional analysis is essential for meaningful public participation.

### **The Tunnel**

The SDEIS contains a lengthy discussion of the shallow tunnel under the Kenilworth lagoon/channel versus a tunnel with a bridge over the channel. The conclusion, not surprisingly is that there will be a non-de minimis use of the Kenilworth Lagoon/Grand Rounds property. The document promises that “all possible planning to minimize harm will be conducted and implemented . . . .”

In order to reach this conclusion the analysis first had to reject the No Build Alternative and the Enhanced Bus Alternative. The latter was rejected because it would be “inconsistent with local and regional comprehensive plans.” Again, no other avoidance options were considered.

### **Conclusion**

The Section 4(f) property identified in the SDEIS has received inadequate review and in many cases incorrect findings of *de minimis* impact. There is glaringly inadequate identification of specific mitigation and avoidance strategies and resulting outcomes as required by Section 4(f). The following statement from the Department of the Interior, which has consultative jurisdiction over this project, is clarifying:

Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable. Also not acceptable is a statement that all planning to minimize harm has been done because there is no feasible and prudent alternative. Reviewers are alerted that a general statement indicating that the sponsor will comply with all federal, state, and local standards and specifications to minimize harm is not acceptable. Also not acceptable is a statement that all planning to minimize harm has been done because there is no feasible and prudent alternative. *Reviewers should make sure that all possible site-specific planning has been done to identify and list the measures which will be undertaken, at project expense, to minimize harm to Section 4(f) properties. (emphasis added)*

**Addendum: Kenwood Isles Area Association**  
**Position Statement on Freight Relocation for SWLRT**

Adopted July 1, 2013

Nearly a mile of the proposed SWLRT runs through the Kenwood Isles Area Association neighborhood. **We vehemently oppose the idea of maintaining freight rail along with light rail at grade in the Kenilworth Corridor, known as “co-location.”**

Relocation of freight out of the Kenilworth Corridor has been promised for years. While the corridor was long used for transporting goods, freight use of Kenilworth was halted in 1993 when the Midtown Greenway was established. When freight was later re-introduced into the Kenilworth Corridor, Hennepin County assured residents this use of the corridor was temporary.

Meanwhile, over 20 years of citizen efforts to build and maintain Cedar Lake Park and the Kenilworth Trail have resulted in a more beautiful and complete Grand Rounds and Chain of Lakes. Traffic on federally funded commuter and recreational bicycle trails in the Kenilworth Corridor grew to at least 620,000, perhaps approaching one million, visits in 2012.

When the Hennepin County Regional Railroad Authority began looking at using the Kenilworth Corridor for LRT, several key studies and decisions reiterated the expectation that if Kenilworth is to be used for transit, then the freight line must be relocated. (See notes below.) Trails were to be preserved. Freight rail was to be considered a separate project with a separate funding stream, according to Hennepin County. This position was stated publicly on many occasions, including Community Advisory Committee meetings and Policy Advisory Committee meetings.

Minneapolis residents have positively contributed to the SWLRT process based on the information that freight and light rail would not co-exist in the Kenilworth Corridor. Although many of us think that Kenilworth is not the best route, most have participated in the spirit of cooperation and compromise to make the SWLRT the best it can be.

Despite numerous engineering studies on rerouting the freight rail, it was not until December 2012 that the current freight operator in the Kenilworth Corridor, TC&W, decided to weigh in publicly on the location of its freight rail route. TC&W rejected the proposed reroute.



The Met Council has responded by advancing new proposals for both rerouting the freight and keeping it in the Kenilworth Corridor. For either option, these proposals range from the hugely impactful to the very expensive – or both. Six of the eight proposals call for “co-location” despite the temporary status of freight in Kenilworth. The Kenilworth proposals include the destruction of homes, trails, parkland, and green space. Most of the proposals would significantly add to the noise, safety issues, visual impacts, traffic backups, and other environmental impacts identified in the DEIS.

This is not a NIMBY issue. The Kenilworth Trail provides safe, healthy recreational and commuter options for the city and region. It is functionally part of our park system. The Kenilworth Corridor is priceless green space that cannot be replaced.

For over a decade public agencies have stated that freight rail must be relocated to make way for LRT through the Kenilworth Corridor. If this position were reversed midway through the design process for SWLRT, the residents of Kenwood Isles would find this a significant breach of the public trust.

Simply stated, none of the co-location proposals are in keeping with the project goals of preserving the environment, protecting the quality of life, and creating a safe transit mode compatible with existing trails.

This has been a deeply flawed process, and we **reject any recommendation for at-grade co-location in the Kenilworth Corridor. If freight doesn't work in St. Louis Park, perhaps it's time to rethink the Locally Preferred Alternative.**

#### **Notes**

1) The 29<sup>th</sup> Street and Southwest Corridor Vintage Trolley Study (2000) noted that, “To implement transit service in the Southwest Corridor, either a rail swap with Canadian Pacific Rail or a southern interconnect must occur.”

2) The FTA-compliant Alternatives Analysis (2005-2007) defines the Kenilworth section of route 3A for the proposed Southwest Light Rail in this way: “Just north of West Lake Street the route enters **an exclusive (LRT) guideway in the HCRRA's Kenilworth Corridor to Penn Avenue**” (page 25). This study goes on to say that “to construct and operate an exclusive transit-only guideway in the HCRRA's Kenilworth Corridor the **existing freight rail service must be relocated**” (page 26).

3) The “Locally Preferred Alternative” (LPA) recommended by HCRRA (10/29/2009) to participating municipalities and the Metropolitan Council included a recommendation that freight rail relocation be considered as a separate “parallel process.”

4) In adopting HCRRA's recommended Locally Preferred Alternative based on treating relocation of the freight rail as a separate process, the City of Minneapolis' Resolution (January 2010) stated:

**“Be It Further Resolved that the current environmental quality, natural conditions, wildlife, urban forest, and the walking and biking paths be preserved and protected during construction and operation of the proposed Southwest LRT line.**

Be It Further Resolved that any negative impacts to the parks and park-like surrounding areas resulting from the Southwest LRT line are minimized and that access to Cedar Lake Park, Cedar Lake Regional Trail, Kenilworth Trail and the Midtown Greenway is retained.”

5) The Draft Environmental Impact Statement supports the Locally Preferred Alternative, which includes relocation of freight out of the Kenilworth Corridor. (December 2012)

6) The **southwesttransitway.org** has stated since its inception that:

Hennepin County and its partners are committed to ensuring that a connected system of trails is retained throughout the southwest metro area. Currently, there are four trails that may be affected by a Southwest LRT line. They are the Southwest LRT trail, the Kenilworth trail, the Cedar Lake Park trail, and the Midtown Greenway. These trails are all located on property owned by the HCRRA. The existing walking and biking trails will be maintained; **there is plenty of**

**space for light rail and the existing trails.** Currently, rails and trails safely coexist in more than 60 areas of the United States.

## **LRT Done Right Addendum on previous communication concerning freight and safety**

Date: September 30, 2014

To: Pipeline and Hazardous Materials Safety Administration and Federal Railroad Administration

From: LRT-Done Right

Re: **Docket No. PHMSA-2012-0082 (HM-251) – Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains**

### **INTRODUCTION AND BACKGROUND**

LRT-Done Right is a grass roots organization that has done much research and advocacy regarding the effects of light rail transit and freight lines on community well being. Limited resources typically prevent community organizations from having the same access to federal regulators that industry representatives do. This opportunity to contribute a meaningful comment is greatly appreciated, as is the Pipeline and Hazardous Materials Safety Administration's (PHMSA) earnest consideration of our comments.

It is noted that relative to the importance of the PHMSA standards, very few parties comment on these proposed rules. At the time of this submission, elected officials have not submitted a comment on behalf of the interest/protection of Minneapolis/St Paul or generally on behalf of Minnesota (i.e. mayor, city council, state legislators, Governor, etc.) and only a few federal politicians have made comment. This is concerning because communities rely on elected officials to serve the best interest of the community residents. Most comments, related to Docket No. PHMSA-2012-0082 (HM251), were generated by individual citizens, small communities or cities, or by industry representatives. As citizens, we have expended great care and effort to learn about the issues of freight safety, and have had to do it quickly.

The large-scale shipment of crude oil and ethanol by rail simply didn't exist ten years ago, and safety regulations need to catch up with this new reality. While this energy boom is good for business, the people and the environment along rail corridors must be protected from harm. Crude oil shipments by rail have increased by over 40-fold since 2005, according to the Association of American Railroad's Annual Report of Hazardous Materials. In fact, more crude oil was transported by rail in North America in 2013 than in the past five years combined, most of it extracted from the Bakken shale of North Dakota and Montana (Stockman).

The National Transportation Safety Board (NTSB) noted their concern to PHMSA, that major loss of life, property damage and environmental consequences can occur when large volumes of crude oil or other flammable liquids are transported on a single train involved in an incident, as seen in the Lac Megantic, Quebec, disaster, as well as several disasters that the NTSB has investigated in the United States. The NTSB recommendations to the Federal Railroad Administration and the Pipeline and Hazardous Materials Safety Administration include reroutes of trains carrying hazardous cargo around populated and environmental sensitive corridors, development of an

audit program to ensure rail carriers that carry petroleum products have adequate response capabilities to address worst-case discharges of the entire quantity of product carried on a train and an audit of shippers and rail carriers to ensure that they are properly classifying hazardous materials in transportation and that they have adequate safety and security plans in place (NTSB).

## RULE ANALYSIS

LRT-Done Right commends PHMSA and FRA for the effort to improve rail safety with the development of this proposed rule. While understanding the need to balance community safety with the needs of railroads as a profitable enterprise, there are several omissions in the proposed standards that we wish to address. It is clear that PHMSA standards for too long have been overly influenced by industry (Straw R), but as recent rail disasters have shown, the necessity to protect the public's interest is imperative. Because we are citizens with limited rail engineering expertise, we will use our own experiences with a small short line railroad called Twin City & Western (TC&W) to illustrate issues with PHMSA standards. TC&W is a Class III railroad with connections to Canadian Pacific, Union Pacific, Burlington Northern and Canadian National. Under current PHMSA guidelines, which apply to Class I railroads, these enhanced tank car standards and operational controls for High-Hazard Flammable Trains (HHFT) would not apply. This is gravely concerning. Our comments will cover issues of rail routing, notification to State Emergency Response Commissions, tank car specifications, and additional requirements for HHFTs.

### Rail Routing -

Missing from standards are guidelines on construction of new transit lines in an active freight rail corridors. Increasingly, light rail transit (LRT) through suburban and urban areas is being run through established freight corridors, which were designed in a different era of rail safety (Sela, et al). LRT routes are planned by local and regional public officials who typically are not adequately addressing the safety of these transit routes, leaving it to affected neighborhoods to advocate for community safety. The trend toward locating LRT adjacent to freight must be addressed in these PHMSA standards. We understand this to be complicated by issues of governance; the Federal Railroad Administration (FRA) regulates freight trains while the Federal Transit Administration (FTA) guides LRT lines. However FRA has ultimate authority and PHMSA writes rules for safety. This particular comment regarding rail routing may be currently beyond the purview of these particular proposed PHMSA standards, never the less we submit these comments to stress their importance to freight safety in shared use corridors, and for immediate consideration and inclusion in this joint PHMSA and FRA rule.

Shared FRA/FTA guidelines are written with respect to Amtrak, and give responsibility to the freight companies for managing shared track (Federal Register, Part VII). Currently, there are no specific safety requirements for either existing or yet to be constructed commuter lines in shared corridors, where track is not shared (Resor R). When track is shared, then commuter lines must meet strict safety guidelines, but when track-separated right of way (ROW) is shared, there are no regulations whatsoever, and localities must police themselves. No guidelines exist that guide either the construction phase of adding LRT lines through an existing freight corridor, or corridor minimum level safety standards. Hence, there are many co-location projects nationwide moving forward, which do not meet minimum American Railroad Engineering and Maintenance-of-way Association (AREMA) guidelines. AREMA guidelines recommend minimum standards for grade separation of 25 feet center rail to center rail. The Rail Safety Improvement Act of 1988 gives the FRA jurisdiction over most types of railroad including shared track LRT (Pub. L. No 100-342), however the FRA has historically not chosen to exercise this authority. This has left shared ROW LRT in a netherworld of un-regulation, which we believe seriously compromises the safety of people, property and environment along these types of corridors.

A case in point is Southwest Light Rail Transit (SWLRT), currently in the early engineering phase and being

considered for construction by the FTA through the Kenilworth corridor in the Minneapolis, MN area. If constructed, LRT will run less than 12 feet from freight rail at a point along the Kenilworth Corridor that regularly carries Class 3 flammable liquids, including long unit trains of ethanol. During the construction phase of a proposed tunnel in an area that can not accommodate both LRT, a freight line, and an existing heavily used bike trail, the freight line, which will continue full service throughout the construction will run just 11 feet from a 35 foot construction pit in an populated area of Minneapolis. In no other instance, could we find current plans to co-locate LRT next to a freight rail line that carries Class 3 flammable liquids. There are other lines that exist where co-location occurs, but these were built many years ago prior to the awareness of the danger existent with oil and ethanol trains. The TC&W freight regularly runs unit trains of 60-100 ethanol train cars through the Kenilworth corridor within feet of the proposed LRT line. Ethanol is highly combustible, which may form explosive mixtures with air and where exposure to electrostatic charges should be avoided (ODN). Yet these electrified LRT lines will literally be next to tanker cars carrying ethanol and other chemicals.

Over the 20-year interval from 1993 to 2012, there were 1,631 mainline passenger train disasters, including 886 grade crossing accidents, 395 obstruction accidents, 263 derailments, 71 collisions. During the same time period, there were 13,563 freight derailments and 851 collisions (Lin et al). Derailments and collisions were identified as the most potentially significant train accident types while human factors accidents and track failures, including obstructions were the primary causes of those accidents (Lin et al). Adjacent tracks, occupied by freight and passenger rail - refers to train disaster scenarios where derailed equipment intrudes adjacent tracks, causing operational disturbance and potential subsequent train collisions on the adjacent tracks (Lin and Saat). Lin and Saat created probability models assessing risk along adjacent tracks to determine risk and severity of a crash leading to a collision or derailment. Identified risk factors included distance between track centers, train speeds, train densities, different train control systems, and level of hazardous train cargo. In the case of SWLRT, this model assessed Kenilworth to be a high-risk rail corridor, yet due to a lack of regulation of co-location, this project progresses.

For transit located on adjacent track to active freight, FRA's concern is that operations of a freight railroad in close proximity to LRT could present safety risks for both. In considering our SWLRT case study, track centers distances are as narrow as 12 feet (11 feet during construction), with 220 LRT trains proposed daily. A derailment of either freight or LRT could be disastrous. With distances of 11-12 feet between SWLRT and freight, if either were to encroach and cause intrusion upon the other, this would likely bring death and destruction, and depending upon the cargo carried, could mean broad evacuation of 1000s of area residents. AREMA's 25 foot standard would be more likely to prevent intrusion onto the adjacent track, and would keep electrified lines away from highly flammable fuel carrying tankers.

None of this accounts for issues related to trains as targets of terrorism or using those trains for terrorist purposes (Brodsky), using chemicals such as chlorine or fossil fuels to create 'bomb trains' or mayhem. Minneapolis is a high threat urban area as determined by the Transportation Safety Administration (TSA); our case study SWLRT parallels freight up to and past the Target Center and the Twins Stadium, two large venues for sports and entertainment. This is another scenario that begs for a solution that would set safety rules for co-location of freight and passenger rail through shared ROW near sites at high risk for terrorism.

The safety requirements for HHFT should apply to Class I, Class II, and Class III railroads. There are short line railroads that are shipping ethanol, and due to common carrier obligations, may be called upon to ship oil, chlorine or other Class 3 flammable liquids. Due to entity size and revenues, these short line railroads typically are Class III railroads. The revenue generating capacity of a railroad should not govern the safety standards to which it is held. If a railroad or shipper does not have the capacity to adhere to the HHFT tank car standards and operational controls, it is dangerous for that entity to be in the business of conveying Class 3 flammable liquids. The relevance of these standards only to Class I railroads, to trains of 20 or more rail cars of hazardous cargo, and to only population areas of 100,00 or more, leave many communities endangered. The safety requirements for HHFT should apply to Class I, Class II, and Class III railroads. The revenue generating capacity of a railroad should not govern the safety standards to which it is held. If a railroad or shipper does not have the capacity to adhere to the HHFT tank car standards and operational controls, it is dangerous for that entity to be in the business of

conveying Class 3 flammable liquids. Additionally, the absence of regulation guiding construction of adjacent rail lines through shared ROW carrying tanker chemicals pose danger to residents along these corridors. Regulatory action must be more broadly addressed to all railroads, on any trains carrying any hazardous materials through any community of any population size.

PHMSA standards are proposed only for communities with population greater than 100,000. We understand the necessity of setting population density standards, but suggest that the threshold of 100,000 is too high. It is discriminatory to penalize a small community and to put them at greater risk due to safe guards not being applicable. Further, it is those communities that would be least likely to absorb the cost of disaster. Railroads must be accountable for safety and exercise due diligence for one tank car or 100 tank cars, in urban and on rural routes. Many of the rail disasters that have occurred happened in areas where populations were less than 100,000 (e.g. Lac Megantic). These communities deserve to be protected too.

#### **Notification to State Emergency Response Commissions (SERCs)-**

The proposed PHMSA rule would require notification to SERCs only if trains containing one million gallons of Bakken crude are operating in their States. The requirement ignores the dangers ethanol and does not acknowledge that as little as one carload of oil or ethanol can trigger disaster, as is evidenced by the summary of selected major oil and ethanol train disasters shown in Table 3 provided in the Docket No. PHMSA-2012-0082 (HM-251).

Ethanol is a Class 3 flammable liquid and is considered as dangerous as oil by the National Transportation Safety Board. Ethanol is appropriately classified as a Class 3 flammable and should not be referred to simply as an agricultural product. Ethanol is caustic to the skin, harmful if breathed, highly flammable and very difficult to clean up especially if released in bodies of water. The reason for this clean up challenge is that ethanol is soluble in water. Unlike petroleum, which can be extracted from the top of the water, concentrated ethanol would require full liquid removal (i.e., in the event of an ethanol spill in a lake, the affected would need to be drained). In groundwater, ethanol does not respond to typical remediation techniques, like air stripping and filtration.

To achieve the best protection for our communities, emergency responders and railroad workers – SERCs must have advance notice that oil and ethanol is being shipped through their states. Further all railroads/shippers of oil or ethanol must design and implement a comprehensive spill response plans. These response plans must be provided in advance to the relevant SERCs, Tribal Emergency Response Commissions, Fusion Centers and any other State designated agencies.

These safety preparedness requirements must apply to all railroads/shippers of Class 3 flammable liquids, regardless of their classification (i.e., Class I, Class II or Class III). Without this requirement there will not be adequate training and incentive to minimize collateral damage to communities.

If a railroad or shipper does not have the manpower and fiscal capacity to develop and execute a Class 3 flammable liquid spill response plan, it is not prudent for that entity to be in the business of conveying Class 3 flammable liquids. Spill response plans should take in to account the terrain, natural geography and municipal development along the route used for transport. Specifically if lakes and rivers are present, the plan must provide for containment to prevent water contamination and plan for the de-contamination of bodies of water. Additionally the presence of other freight and/or public transit modes in the same ROW corridor, along with the proximity to residential and school areas, must be addressed in developing the appropriate spill response plan.

#### **Tank Car Specifications -**

PHMSA recognizes that DOT-111 tank cars can almost always be expected to breach in the event of a train crash and resulting in spills, explosions and destruction, yet the proposed new rule on train operation and tank car

design would fail to take a single DOT-111 car off the rails. New designs for DOT-111s include increased minimum head and shell thickness, top and bottom fitting protection, a thicker head shield, and head and shells constructed of normalized steel. The guidelines recommend that new DOT-111s ordered after October 1, 2011, be built to this standard. We appreciate these new standards. However, the type of crude involved in the Lac Megantic disaster could be carried on the least safe DOT-111 tank cars until Oct. 1, 2018. An immediate ban on shipping volatile crude and ethanol in the DOT-111 tank cars is in order.

Short line railroads like TC&W in Minnesota are small and often unable or unwilling to purchase these new tanker cars because their ability to invest capital in new cars is limited. They instead tend to purchase used tanker cars from other larger railroads that are retiring those for newer tank cars, and they retrofit older used cars to meet minimum safety standards. It is ironic that these short line railroads which are often run through heavily populated urban corridors have the worst quality tank cars in all the fleets, yet run through the most densely populated corridors. Of the 94,178 cars in flammable service, currently only 14,150, or 5 percent of the total DOT-111 fleet (15 percent of the flammable service fleet), have been manufactured to comply with new standards (Pumphrey et al).

Additionally, as the amount of oil being shipped by rail has increased, train companies have moved to using unit trains for shipping higher volumes (Pumphrey et al). Unlike a manifest train, which might carry a variety of different commodities, a unit train carries only one commodity (e.g., ethanol or crude oil). Unit trains consist of between 50 and 120 tank cars, the equivalent of 50,000 to 90,000 barrels of oil, becoming a "virtual pipeline" or a potential bomb train. Unit trains may increase efficiency but also increase risk. According to the American Association of

Railroads (AAR), "a single large unit train might carry 85,000 barrels of oil". There is no publicly available data on how much oil or ethanol is being shipped in unit trains versus non-unit trains (Pumphreys et al). Shippers of crude oil currently are not required to prepare a comprehensive oil spill response plan (OSRP). Shippers should be required to report even one tanker car of oil or ethanol. And limits should be placed on the number of tanker cars in any single train, especially through high population density areas.

In the case of SWLRT, nearly all ethanol trains that run on the freight track are unit trains. Substandard tank cars combined with the fact of unit trains and a high number of tanker cars means that the Kenilworth Corridor is at high risk. The proximity of an electrified LRT a mere 12 feet from tanker cars could mean that this neighborhood could become ground zero in case of derailment.

The next generation tank cars should exceed the previous 2011 standards, and that should be phased in at a quicker pace than proposed. It is clear that rail company lobbyists are actively trying to minimize PHMSA regulatory tanker car standards (Straw). You must steal your resolve and demand improvements for public safety, and for short line railroads demand similar standards with no waivers.

Small short line railroads are often not given the attention or training of larger railroads, yet they often utilize the worst tanker cars and have the least emergency training. Short Line Railroad Safety training for short line railroads transporting crude and ethanol must be a greater priority, because they often run through high-density urban corridors.

#### **Additional Requirements for High-Hazard Flammable Trains (HHFTs)-**

The proposed rule defines a HHFT as a single train carrying 20 or more carloads of Class 3 flammable liquid. The definition does not serve the safety interests of the United States. It is documented that one carload of Class 3 flammable liquid can trigger a disaster and devastation. For that reason, a HHFT should mean a single train carrying one or more carloads of Class 3 flammable liquids.

Further the proposed rule applies only to trains operated by Class I railroads. The PHMSA and FRA safety rules related to Class 3 flammable liquids should be in effect for all railroads/shippers that convey Class 3 flammable

liquids. The class (i.e., Class I, II or III) of a railroad is determined by its revenue generation. It is not reasonable to exempt a railroad from important safety requirements based of its revenue generating capacity. If a railroad/shipper does not have the capacity to adhere to relevant HHFT and Class 3 flammable liquid safety standards, it is not prudent for that entity to be in the business of conveying Class 3 flammable liquids. This important safety rules must apply to all classes of railroads, otherwise there are opportunities to circumvent necessary precautions and responsibilities.

Further the proposed rule does not address the liability insurance requirements for railroads/shippers of Class 3 flammable liquids. This is a complicated topic especially when the condition of a share ROW exists. Goals of insurance requirement should address:

1. Allocating the liability from risks between the freight railroad and the transit agency
2. Managing the additional risk by developing a prudent insurance strategy
3. Ensuring the safety of passengers in mixed freight and transit operations
4. The willingness of freight railroads to grant access to their ROW for transit operations
5. Providing satisfactory conditions for continuing service to freight customers  
requirements, the public will be exposed to uncompensated losses when freight and transit disasters occur.

Without adequate

## RECOMMENDATIONS

These proposed PHMSA rules are a beginning toward building a safer rail industry. However, the more we investigated the rules, the clearer it became that the rules do not go far enough to protect the public. The current standards are remarkable more for what they do not regulate than for what they do. Much more needs to be done to ensure public and environmental safety. We recommend that PHMSA immediately incorporate the recommendations listed below to expand this rule on safety standards to better protect the public and the environment:

1. Modify the definition of a high-hazard flammable train provided in Section 171.8 to read as follows: High hazard flammable train means a single train carrying 1 or more carloads of a Class 3 flammable liquid.
2. The PHMSA and FRA rules must apply to all trains conveying Class 3 flammable liquid regardless of railroad classification (i.e., includes Class I, Class II and Class III railroads). This would extend PHMSA regulatory actions to all railroads regardless of Class.
3. The PHMSA and FRA safety rules should apply equally to HHFTs that are conveying oil and/or ethanol. The NTSB views ethanol as dangerous as oil. Having safety rules that address the conveyance of oil but do not apply to ethanol carriers is flawed, as both are Class 3 flammable liquids.
4. Ban the use of DOT-111 tank cars now for transporting any amount of hazardous materials, instead of focusing solely on trains with more than 20 railcars of crude oil. The proposal to allow continued use of DOT-111 cars on trains of fewer than 20 cars would fail to protect public safety and the environment.
5. DOT-111 cars should not be used for the transport of any crude oil or fossil fuels, regardless of classification.
6. Retrofitting a car that fails to meet every standard of the most protective new tank car design should be barred from use for all shipments of hazardous materials, regardless of class and have regular safety

inspections to assess their continued safety.

7. Require that any and all railroads/shippers conveying one car load or more of Class 3 flammable liquids are required to notify SERCs about the operation of these trains through their States. Further it is recommended that comprehensive spill response plans be submitted for review and approval by relevant federal agencies under the National Contingency Plan, along with PHMSA. Given the relatively few number of railroad entities, it is not anticipated for this to be an undue burden. To minimize risks due to outdated comprehensive spill response plans, it is strongly recommended that plans be updated at least on a 3-year cycle and whenever there is a change of ownership in the railroad or shipper.
8. Enforcement of PHMSA/FRA/FRA rules and inspections do not happen regularly due to minimal federal staffing. An increase in the frequency of inspections is recommended, with funding provided by railroad fees.
9. Implement federal standards and rules that would minimize the occurrence of the key causes of train derailments resulting in spills: namely, the size of trains, state of infrastructure and human error. The proposed rule enumerates the most common causes of hazardous train derailments but fails to propose meaningful solutions such as limits on the number of cars permitted in each train, the use of unit trains, requirements for new build outs in shared row, infrastructure and inspection improvements, and management and oversight.
10. Derailments and spills can happen everywhere. Instead of selectively protecting only the most densely populated cities, apply these standards everywhere. As written, the proposed rules are designed to reduce risk to communities of greater than 100,000 people, but protections should be afforded all communities. These standards specifically acknowledge that it is putting people at risk solely because of where they live. This is immoral.
11. Sensitive environments including but not limited to areas near water, drinking water supplies, parks and animal habitat should be protected by all available safety standards.
12. Require full public disclosure to first responders of all hazardous rail shipments. There should be no exemptions for trains with fewer than 35 cars. Even one car of hazardous cargo should be disclosed so that emergency responders can act appropriately in the case of a disaster.
13. Uniform federal level guidelines should be developed to guide all future construction and management of LRT/commuter rail lines in shared freight/transit corridors, in particular along corridors that carry Class 3 flammable liquids.
14. A comprehensive study of derailment probability in shared ROW should be undertaken to understand the effect of track spacing, electrification of LRT adjacent to gas/oil/ethanol bearing trains, train speeds, train cargo, and train ownership (long range vs. short line railroads).
15. Minimum standards should be set for co-location of passenger and freight co-location, including that ROW should meet the AREMA minimum safety standard of 25 feet center rail to center rail (Caughron B et al). Immediately institute a moratorium on the building of LRT lines adjacent to freight lines that are conveying any amount of Class 3 flammable liquids in corridors that do not meet AREMA's 25 feet center rail to center rail standard.
16. All trains conveying Class 3 flammable liquids should be re-routed outside of high risk urban areas and away from areas at high risk for derailment or terrorism including urban neighborhoods, downtown areas, malls and major sports and entertainment complexes.

## CONCLUSION

Given the exponential increase in shipments of oil and ethanol, the need to upgrade and implement relevant freight rail safety standards is urgent and necessary to the well being of our communities and environment. The coordination of oversight authority for all railroads (i.e., Class I -III) and public transit projects safety must also



improve. The proposed rule along with the aforementioned recommendations will serve to protect our nation and place the responsibility for safety precautions with the appropriate entities and not place undue burden on communities and residents.

#### SOURCES

Brodsky B. Industrial Chemicals as Weapons: Chlorine. NTI: Building a Safer World. <http://www.nti.org/analysis/articles/industrial-chemicals-weapons-chlorine/>.

Caughron B, Saat MR, Barkan C. Identifying and Prioritizing Shared Rail Corridor Technical Challenges. AREMA Conference 2012. <http://railtec.illinois.edu/CEE/pdf/Conference%20Proceedings/2012/Caughron%20et%20al%202012.pdf>

Federal Register, Part VII, 49 CFR Parts 209 and 211.

Lin CY, Saat M, Barkan C. Causal Analysis of Passenger Train Accident on Shared-Use Rail Corridors. Transportation Research Board 93rd Annual Meeting. Nov 2013. <http://assets.conferencespot.org/files/server/file/64876/filename/14-2181.pdf>.

Lin CY, Saat, M. Semi-quantitative Risk Assessment of Adjacent Track Accidents on Shared-Use Rail Corridors. April 2014. Proceedings of the 2014 Joint Rail Conference JRC2014. <http://railtec.illinois.edu/articles/Files/Conference%20Proceedings/2014/JRC2014-3773.pdf>.

ODN. Online Distillery Network. Ethanol Materials Data Safety Sheet. <http://www.distill.com/materialsafety/msds-eu.html>.

NTSB. NTSB calls for tougher standards on trains carrying crude oil. Press Release. Jan 23, 2014. <http://www.nts.gov/news/2014/140123.html>.

Pumphrey D, Hyland L, Melton M. Safety of Crude Oil by Rail. March 2014. Center for Strategic and International Studies. [http://csis.org/files/publication/140306\\_Pumphrey\\_SafetyCrudeOilRail\\_Web.pdf](http://csis.org/files/publication/140306_Pumphrey_SafetyCrudeOilRail_Web.pdf).

Resor R. Catalogue of Common Use Corridors. USDOT/FRA/ORD03/16. April 2003

Sela E, Resor R, Hickley T. Shared Use Corridors Survey of Practice and Recommendations for the Future. Crossing and Shared Corridors. [www.onlinepubs.trb.org/onlinepubs/circulars/ec058/08/\\_04\\_sela.pdf](http://www.onlinepubs.trb.org/onlinepubs/circulars/ec058/08/_04_sela.pdf).

Straw R. White House Agency Under Pressure From Big Oil & Rail – Accused of “Coddling” the Industries. The Benecia Independent. June 2014. <http://beneciaindependent.com/white-house-agency-under-pressure-from-big-oil-rail-accused-of-coddling-the-industries/>.

TSA. Part 1580. Appendix A. <http://www.gpo.gov/fdsys/pkg/CFR-2011-title49-vol9/pdf/CFR-2011-title49-vol9-part1580-appA.pdf>.